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Contributors

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REPORT

ON THE

**Health of the Urban District of
Swinton and Pendlebury**

FOR THE YEAR 1919,

TOGETHER WITH THE

Report on Medical Inspection of School Children.



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Staff of Public Health Department ..

Medical Officer of Health :

W. STEWART STALKER, M.D. (Glasgow), D.P.H. (Oxford).

Inspector of Nuisances :

ALBERT BLEAKLEY.

Assistant Sanitary Inspectors :

*P. E. BERRY.

†¶ L. A. MARSHALL.

‡ A. S. KERSHAW.

‡¶ G. E. TAYLOR.

Clerk in Public Health Department :

J. FLOWER.

Health Visitors :

Miss E. ALLEN.

Miss J. L. BRINDLEY.

* Returned from Military Service, November 15.

† Returned from Military Service, October 6.

‡ Appointed permanently, September 29.

¶ Engaged on duties under Housing Acts.

Statistical Summary for 1919.

Area in Acres	2,292
Population at Census of 1911	30,759
*Estimated Population in July, 1919	30,600
Registrar General's Estimation: For Births	29,318
For Deaths	28,144
Number of Houses in the District on December 31, 1919 ..	6,706
Number of Persons in each inhabited house (at Census of 1911) ..	4.68
Number of Births during 1919	550
Birth-rate per 1,000 of the Population	17.9
Registrar General's Birth-rate	18.7
Number of Deaths	382
†Death-rate per 1,000 of the Population	12.4
Registrar General's Death-rate	13.5
Natural Increase of the Population during the year	168
Number of Deaths of Infants (under the age of one year) ..	54
Infantile Mortality per 1,000 Births	98.1
Registrar General's Infant Mortality Rate	96.0
Number of Uncertified Deaths	4
Death-rate from the seven principal Zymotic Diseases per 1,000 of the population	0.3
Death-rate from Diarrhoea and Enteritis, of Children under two, per 1,000 births	3.6
Death-rate from Phthisis per 1,000 of the Population	1.2
Death-rate from all forms of Tuberculosis per 1,000 of the population	1.0
The Rateable Value of the District was	£124,083
Produce of a Penny Rate	£445

*It will be observed that there is considerable disparity between the population estimated by the Registrar General and that estimated by the Council officials. The latter estimation was made on returns obtained at a later date than those on which the Registrar General's estimation is based, and is thought to be the more accurate.

†It is admitted that the death-rate of 12.4 is probably too conservative an estimate, as this figure is compiled on total estimated population, and therefore includes military population, concerning whom no death returns were made by District Registrars. The mean of the Registrar General's figure and that given as the local estimate is probably more accurate.

To the Chairman and Members of the Swinton and Pendlebury Urban District Council and the Co-opted Members of the Maternity and Child Welfare Committee.

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present the Health Report of the District for the year 1919.

In doing so it gives me pleasure to be in a position to record the lowest general death-rate and second lowest infant death-rate the district has ever known.

It cannot be contended that the year was characterised by freedom from epidemic illness, for waves of three different infections swept it during its passage. It is therefore all the more remarkable that the mortality rate should be so favourable in comparison with years of no epidemic prevalence.

The past year has seen the creation of a Ministry of Health, and great changes in administration areas for health purposes are foreshadowed. Autonomy of the smaller Urban Sanitary districts would appear to be at stake.

In the recasting of areas it is to be hoped that local sanitary authorities which have been heedful of their moral obligations, as evidenced by sound and progressive administration, will not be engulfed by reactionary bodies, and suffer the inevitable set-back of such a process.

Whatever be the constitution of local health authorities they are confronted by problems connected with national health, the gravity of which is reflected in the findings of the National Service Medical Boards.

What reliance should be placed upon these findings is debatable, but that the nation's health is impaired to an extent which calls for drastic action cannot be doubted.

The findings of the Medical Boards with respect to the area in which this district is situated make sorry reading, and their verification is too often forthcoming in the inspection of the coming generation to seriously question their significance.

Factors are at work in this and contiguous districts which would appear to be provocative of morbidity to an extent disproportionate to that produced by factors at work in the country in general. The elucidation of these factors and their treatment should constitute one of the chief activities of the Ministry of Health.

The Ministry will require the unstinted help of all local authorities. It does not expect that these bodies, obsessed by the clamant demand for retrenchment, will see in expanding public health administration profligacy with the public purse.

The officials responsible locally for administration also need the sympathy of their Councils. Too often is unreasonable criticism made concerning proposals of officials, who, zealous for the competent conduct of the work of their departments, find it necessary to represent to their authorities that expansion is necessary.

My thanks are due to all members of the staff of the Public Health Department, Inspectors, Health Visitors, and Clerk, for their untiring efforts to make their particular work a success.

I have the honour to be,

Mr. Chairman, Ladies and Gentlemen,

Your obedient servant,

W. STEWART STALKER.

Council Offices, Swinton,
March, 1920.

I. The Urban District.

The Urban District of Swinton and Pendlebury lies W.N.W. of Manchester, from which it is separated by the County Borough of Salford.

The Local Government District was constituted by an order dated the 25th day of January, 1867, and was formed by the Union of the civil parish of Pendlebury with the hamlets or places known as Swinton, Little Houghton, and the Lower Division of Worsley.

The petition praying for a definition of the boundaries of a local government district was the direct result of the last of the great cholera epidemics.

The total acreage of the district is 2,292, but of this total only 851 acres are built upon. The remaining 1,441 acres of unbuilt land are in part laid out in public parks and recreation grounds. The acreage of public parks and recreation grounds is as follows :—

Victoria Park	..	..	..	..	12	acres.
Moorside Park	..	..	..	..	9½	„
Newtown Recreation Ground	..	..	..	..	2¼	„
Public Gardens, Chorley Road	..	..	..	..	½	„

The highest point of the district is 286 feet above sea level, and the lowest is 99 feet above sea level.

The geological features of the district are, shortly, as follows :—The Urban District is on the Coal Measures, which, however, are overlaid by a considerable amount of Drift, chiefly in the form of Glacial Sand and Gravel, and of River Valley Gravel. The soil on which the greater part of the housing is situated is dry sand of uncertain depth.

The district is divided into six wards.

The following institutions are within the district boundaries :—Poor Law Schools of the Manchester Guardians ; Manchester Children's Hospital ; Swinton House and Parkfield, Manchester Education Committee Cripple Schools.

POPULATION.

An estimation of the population was made in October of 1919 for the purpose of supplying information necessary in connection with the housing survey. The figures were taken from returns made to the local Food Control office, and it is deemed that they are of such accuracy as to form some reliable basis on which to calculate vital statistics.* This much can be said, that there is no more accurate figure available. It was somewhat surprising to find a figure as low as 30,600. There were no means available of estimating the number of men who were still on service at the time of estimation. It has been deemed expedient, on account of the constantly varying figure of population throughout 1919, to accept the figure 30,600 as the population for all rates, and accordingly the general birth-rate, death-rate, and infectious disease-rates have been calculated on that figure. The rates for wards do not profess absolute accuracy, as ward populations have been arrived at by a different, and probably less accurate, method. They have, however, relative accuracy, and as they are only presented for comparative purposes they fulfil their purpose.

OCCUPATION.

The industries which give employment to a great proportion of the industrial population are the cotton industries, the coal mining industry, and, to a certain extent, engineering.

*The rate books show 6,706 houses in the district. Returns were made to the Food Control only from 6,639 houses, so that the population estimation is an under-estimation by about 300.

Poor Law Relief in Swinton Township.

Poor Law Relief in the Townships was as under:—

Total amount of Out-Relief for year ending December

31st, 1919 £722 6 3

No. of persons for each month in receipt of Out-Relief:—

1919.	Men.	Women.	Children.
January	10	42	58
February	8	42	53
March	9	41	52
April	10	40	55
May	9	41	55
June	9	39	51
July	7	35	38
August	6	35	36
September	9	32	36
October	11	39	47
November.....	24	30	52
December	22	25	52
Total number of cases admitted into Workhouse ..			7
Do. do. do. Infirmary ..			37

Poor Law Relief in Pendlebury Township.

Total amount of Relief (Outdoor) for year 1919 .. £395 18 6½

No. of persons for each month in receipt of Out-Relief:—

1919.	Men.	Women.	Children.
January	1	11	19
February	2	11	18
March	4	12	26
April	3	11	26
May	2	5	13
June	2	6	19
July	3	11	22
August	2	8	8
September	3	10	14
October	6	12	15
November.....	4	11	14
December	4	11	14
36			208
Total number of cases admitted into the Workhouse ..			4
Do. do. do. Temporary Infirmary			3
Do. do. do. Union Infirmary			24

PENDLEBURY.

UNEMPLOYMENT BOOKS LODGED, OUT-OF-WORK DONATION POLICIES LODGED, AND NUMBERS ON LIVE REGISTER.

(a) INSURED TRADES.

	INSURED TRADES. U. I. Books and O. W. D. Policies Lodged.				INSURED TRADES. Numbers on Live Register.			
	Year ending Mid-January, 1920.		Year ending Mid-January, 1919.		Year ending Mid-January, 1920.		Year ending Mid-January, 1919.	
	Total.	Percentage.	Total.	Percentage.	Men.	Women.	Men.	Women.
	Total.	Percentage.	Total.	Percentage.	Men.	Women.	Men.	Women.
At Mid :—								
February	199	8.9	13	0.7	59	33	92	8
March	73	3.2	14	0.7	38	1	39	13
April	87	3.5	5	0.2	72	1	73	4
May	46	1.8	7	0.2	56	1	57	8
June.....	32	1.3	3	0.1	25	—	25	2
July	25	0.9	1	0.0	24	—	24	18
August	24	0.9	2	0.1	21	—	21	15
September	39	1.5	12	0.5	15	—	15	8
October	51	2.2	6	0.3	20	—	20	15
November	46	2.0	14	0.6	32	—	32	16
December	54	2.3	25	1.2	38	—	38	9
January	71	2.9	138	6.1	69	—	69	33

II. Vital Statistics.

BIRTHS.

550 births were registered during 1919. There were 54 more children born therefore than during 1918. The rates for the two years were : for 1919, 17·9; for 1918, 15·8. This happy increase in the number of births was accompanied by a lowering of the infant death-rate, which for 1919 was 98·1, whereas for 1918 it was 102·8. Whilst there is room for congratulation in the increased number of births there can be no doubt in the mind of anyone that a birth-rate of 17·9 in a working class population is a disaster. The gravity of it must best be understood by those who have the continued prosperity of the industrial concerns of the district as an interest. I am told by managers of mills that the difficulty of getting juvenile labour is great, and when I realise that the district industrial concerns have grown and that in 1904 this district birth-rate began its almost acute descent, I am not surprised. In 1904 the district birth-rate was over 30 and declining. Three years later it was 27. The effects of these years are being now felt in deficient supply of labour. What will be the effect fourteen to sixteen years hence of a birth-rate of 17·9 can well be imagined. For every 500 juveniles who are available for industry to-day in fourteen years there will be only 300 available. At a time when industrial effort is being called for in increasing amount the effects of a lowered birth-rate are being felt, and will be increasingly felt throughout the next fourteen years. How, then, is this increased output to be obtained if the labour is not forthcoming? I leave the answer to that question to those who are more expert in economics than I am. Another aspect of the question, and this is directly concerned with economics, is that the contribution of 300 persons to the State, unless on an increased basis, will be less than that of 500 persons. A lowered birth-rate must, therefore, mean increase of taxation.

The question will naturally be asked, What can be done to raise the birth-rate? Out of this question arises another. Is declining birth-rate a natural process? If so, then attempts to raise the birth-rate must fail. If it is not a natural phenomenon what can be done to counter unproductivity? I am certain, and I think all who have applied themselves

to this particular problem are certain, that the provision of new houses will act beneficially, inasmuch as it will allow marriage to persons contemplating matrimony but prevented from carrying out their intention by inability to make a home. I admit that the poorest and most overcrowded houses provide the greatest number of births, but I do not admit that the abolition of slumdom and poverty is likely to diminish fertility. Periods of prosperity and post-war periods have been associated, it is said, with high birth-rates, and there is some support for the supposition that war is followed by a period of increased productivity, in the great increase at present of the Paris birth-rate. Prosperity would appear to be the most reliable structure upon which to build a hopeful view. Deprive the artisan of the worry of how to provide food and raiment for his offspring, provide him with a home in which the decencies of life are capable of being observed, and give him a wage which scorns subsidy, and he will assure the perpetuation of his species, without which cannot exist the concerns which employ him, and which often in times past employed him at remunerative rates which were a scandal to civilisation.

The subjoined table gives the ward birth-rates for the year 1919 :—

Ward.	No. of Births.	Rate.
Victoria Park	108	17.5
Old Park	81	15.0
Moorside	73	17.0
Newtown	90	15.7
Market	92	18.3
East.....	106	22.2

DEATHS.

The number of deaths in the district last year was 382, and the death-rate was 12.4. The figures for 1918 were 463 and 15.8.

The natural increase for 1919 was 168, whereas for 1918 it was 33.

The number of births, deaths, and the birth-rate and death-rate, and the amount of natural increase for each ward is given in the subjoined table :—

	No. of Births.	Birth Rate.	No. of Deaths.	Death Rate.	Natural Increase.
Victoria Park	108	17.5	79	12.8	29
Old Park	81	15.0	59	10.9	22
Moorside	73	17.0	42	9.7	31
Newtown	90	15.7	60	10.4	30
Market	92	18.3	69	13.7	23
East.....	106	22.2	73	15.2	33

The difference between the death-rates in 1918 and 1919 is to be attributed to the lessened incidence of influenza in 1919. Had influenza not been prevalent in 1918 the death-rate would not have been much less favourable than in 1919. Had not an epidemic of influenza in the spring of 1919 contributed to total deaths the death-rate would have been remarkably low. As it is, it has never before been so low as 12.4, and when it is recalled that in 1900 the death-rate was over 23, and averaged 20 about that period, it is surely matter for congratulation, whatever be the cause, that, comparatively speaking, the district's increasing healthiness should be so indisputably demonstrated. I shall expect to hear these figures quoted in the course of debate as a reason for decrease of staff. Such healthiness, it will be contended, requires no supervision, just as it has been affirmed with delightful logic that the district's health, because of an influenza pandemic, has deteriorated since the appointment of additional officers, and that further appointments could but accentuate the process of deterioration.

INFLUENZA.

An outbreak of influenza which had been quiescent since December of the previous year was in evidence in February and March of 1919. Judging from the death certifications, however, the outbreak was neither as extensive nor as fatal as that of November-December, 1918. Nevertheless, the evidence forthcoming at the time of this early spring outbreak was to the effect that much severe illness was experienced. Several households were wholly incapacitated, and it became quickly evident that the activity of the Council should be directed towards supplying household help where such was needed. This was done. A panel of home helps was formed, and although difficulties arose when helps realised their responsibilities, on the whole the system was successful. Advertisements in the local press calling for voluntary assistance from persons possessing some form of nursing training met with little response, and it became speedily apparent that dependence for nursing would have to be placed on the Local Nursing Association. The Medical Officer of Health accordingly met the Association, and it was agreed that extra nursing assistance be procured by the Association during the epidemic, the expense involved being the responsibility of the Council. As far as I know this arrangement was quite satisfactory. What will be the position as regards nursing in the event of a fresh outbreak cannot be stated. A new Association in the district, I am told, will adhere to a rule that infectious cases be excluded from the benefits of the Association, and influenza coming within the category of infections cannot logically be dealt with by the Association's nurses, when pneumonia consequent upon measles is forbidden soil.

Nourishment in the form of milk was provided in necessitous cases.

Altogether twenty-nine deaths were attributable to influenza in 1919, the last being recorded in June and the earliest in February.

The preventive measures adopted were school closure for three weeks and the exclusion of children from picture palaces.

During school closure organised games and walks were undertaken by the school teachers with a view to obviating the detrimental disciplinary effect upon children prolonged and repeated absence from school has in a district such as this. The scheme worked admirably. The health of the children was uniformly excellent, and a form of education of which I have something to say in another part of this report, was instituted which should be developed to its utmost in a district possessing houses and schools which militate against resistance to disease.

PNEUMONIA AND BRONCHITIS.

86 deaths from pneumonia and bronchitis were registered. The pneumonia figure shows a diminution and the bronchitis figure shows an increase on the previous year. The diminution of the pneumonia figure would appear to be somewhat dependent upon the lessened incidence of influenza, but the increase of bronchitis, which one might have associated with measles in a year of prevalence of that disease, was mainly due to deaths in persons of over 45 years of age.

In another part of this report I have indicated that it appears to me that without the hearty co-operation of the private practitioner in the study of the etiology of disease much progress will not be made, despite notification. The disproportion between pneumonia incidence in the South and North of England calls for some explanation. Who is likely to afford that explanation—the public official, who sends out his staff to ask certain stereotyped questions, the answer to which he plots out and then attempts the construction of etiology and history away from source, victim, and environment, or the medical practitioner who is in touch with the case from start to finish? Much good work has been done by routine official enquiry, but much more could be done, and it is to be hoped will be done, when the private doctor is encouraged in the belief that he is the biggest factor in the elucidation and prevention of disease, and that if his mind is trained to direct itself into the channels in which run the influences contributory to sickness in each of his cases, he will not only supplement but supplant much existing machinery.

Bronchitis and pneumonia kill more people by far, in Swinton and Pendlebury, than any other single affection. How far the incidence is contributed to by housing is impossible to say, but some suggestive information lies in the figures recently given in a housing report, in which it was demonstrated that the pneumonia-bronchitis death-rate in a certain area represented as unhealthy was more than double that of the district death-rate from the same causes. Many houses into which I penetrate condemn to death from the onset of illness. Recovery from pneumonia in these insanitary shacks is little short of marvellous.

CANCER AND MALIGNANT DISEASE.

The deaths from this cause numbered last year 26. A death-rate of 849 persons per 1,000,000 living was thus in operation in 1919. In 1918 the rate was 686. Both these rates are considerably lower than those of 1916, which was 1,274. There is, therefore, no evidence to show that the death-rate from malignant disease tends towards a gradual increase, such as is shown in the reports of the Registrar-General. Between 1911 and 1916 the crude rate for the country generally had risen from 1,037 to 1,166. In such a small population as there is in this district it is not permissible to draw inferences from figures such as the cancer returns afford.

INFANT MORTALITY.

54 infants died last year. The rate of infant mortality was 98.1 per thousand. This is the second lowest rate the district records provide. A rate of 93.2 was obtained in the year 1912, but there would appear to be some reason for doubting that figure. However, the infant death-rate in Swinton and Pendlebury has ever been subject to much greater fluctuation than the general infant death-rate. Thus in the years 1904, 1905, 1906, and 1907 there were the following extraordinary variations: 244, 128, 199, and 107. Of recent years the fluctuating tendency has been less marked. After a rise subsequent to the phenomenal drop in 1912 the rate remained constant, and with the decreasing number of births in the years of the war period it has come down by much less marked yearly variations than were formerly in evidence. What influence a very much diminished birth-rate has on infant death-rate cannot be said with certainty, but I think it may be assumed that fewer births mean fewer lives of diminished expectancy. I am of opinion that the later members of large families born in rapid succession are more at risk in the first year of life than are the members of small families. There is thus some reason for thinking that a declining birth-rate and infant death-rate

synchronise, and that however great the influence of agencies directed towards the prevention of infant mortality may be, some considerable part in the story of decline must be attributed to nature.

The infant mortality rates for the different wards were as follows :—

Victoria Park	101·8
Old Park	61·7
Moorside	82·3
Newtown	55·5
Market	119·5
East.....	150·9

In comparing these figures it will be well to keep in mind the birth-rates. A study of the tables of causes of infant death brings into relief the fact that 57 per cent. of the deaths occurred before the infants were four weeks old, that 40 per cent. occurred before the infants were one week old, and that 42 per cent. were attributable to causes which were operative before birth. If it be true that these causes are in the main preventible then the infant death-rate is possible of reduction to a figure which twenty years back would have been thought highly imaginative.

In addition to the 23 deaths attributable to pre-natal causes there are to be added 25 still-births (16 males and 9 females), so that the known death-rate from pre-natal causes was 60 per cent. of the total deaths, and if the unrecorded miscarriages could be added it would be seen that organisation against post-natal causes should be a mere supplement to organisation connected with the graver problem of pre-natal causes.

A fuller analysis has been made of the circumstances connected with 23 of the 25 intra-uterine deaths, and 53 of the 54 deaths which occurred during the first twelve months of life. One extra uterine death which occurred outside the district was not included in the enquiry. Two intra-uterine deaths could not be fully investigated.

Four of the still-births were 1st pregnancies—all males.

Three of the still-births were 2nd pregnancies—all males.

In the later pregnancies males and females were more equally distributed.

Three still-births occurred during 8th pregnancy.

One still-birth occurred during 9th pregnancy.

One still-birth occurred during 10th pregnancy.

Coming now to the post-natal deaths, the figures are in 34 boy deaths and 19 girl deaths :—

Nine first-birth deaths were of boys, five were of girls.

Eight second-birth deaths were of boys, two were of girls.

The total births were 271 males and 279 females, so if the 16 male and 9 female intra-uterine deaths be added to the total registered infant deaths, death-rates of 180 per 1,000 births for males and 103 per 1,000 births for females are found.

The conclusion arrived at is that an equal number of male and female children reached at least the 26th week of pregnancy, that both inside and outside uterine life the male was at greater risk, and that the mortality of males in first and second pregnancies was pronounced.

In connection with history of previous deaths the following facts were ascertained :—

STILL-BIRTHS (Total number investigated 23).

- In 5 cases there had been 1 previous infant death.
- In 2 cases there had been 2 previous infant deaths.
- In 3 cases there had been 3 previous infant deaths.
- In 17 cases there had been 1 previous still-birth.
- In 5 cases there had been 2 previous still-births.
- In 1 case there had been 3 previous still-births.

INFANT DEATHS (Total number investigated 53).

- In 25 cases there had been 1 previous infant death.
- In 12 cases there had been 2 previous infant deaths.
- In 4 cases there had been 3 previous infant deaths.
- In 4 cases there had been 4 previous infant deaths.
- In 4 cases there had been 5 previous infant deaths.
- In 2 cases there had been 1 previous still-birth.

The conclusion arrived at in the study of these findings is that still-birth succeeds still-birth, and infant death infant death. There is something very significant in the fact that 23 women of a total of 25 who gave birth to still-born children in 1919 had previously had at least one still-born child, and information in this connection concerning the other two was wanting.

The mothers of 5 (20 per cent.) of the infants born dead were employed during pregnancy.

The mothers of 6 (11 per cent.) of the infants who died before reaching the age of one year were employed during pregnancy.

Employment in this case means that expectant mothers undertook arduous duties away from home. The nature of these duties was as under :—

Charwomen	2
Pit Brow Workers	4
Weavers and Spinners	3
Ward Maid	1
Domestic Servant	1

These figures are small, but it should be realised at the same time they form a large proportion of the mothers of offspring which failed to survive critical periods, and proportionately applied to a population of the magnitude of large towns they would be more impressive.

In connection with the 23 still-births and 53 infant deaths investigated the health of the mothers was as follows :—

	No. Defective in Health.	
	Still-Borns.	Infant Deaths.
	(No. Investigated, 23).	(No. Investigated, 53).
Before pregnancy	16	17
During pregnancy	16	20

Investigation of environmental conditions in connection with 23 pre-natal and 53 post-natal deaths gave the following information :—

14	houses	were overcrowded.
24	„	were imperfectly ventilated.
17	„	were imperfectly lighted.
30	„	were dirty.
38	„	had other sanitary defects.

In connection with defects of sanitation, it is matter for surprise that some infants do outlive the critical periods. Closely associated as I am with infant welfare work on the one hand and housing inspection on the other, I confess to amazement at the extraordinary vitality which is evidenced in many of the infants I see from week to week. I know the homes they come from, dirty and dilapidated beyond redemption; I know the struggle those innocents have for their inalienable right—the right to live,—and I am profoundly impressed that they do live. But, although surviving, many evidence the struggle. The pinched look, the

rickety frame, the lustreless hair and eyes, betoken man's inhumanity to man. It is a false indictment to attribute infant morbidity to parental indifference, where houses shelter people—who cannot get better—under conditions of dilapidation, filth, and squalor, which subvert and finally destroy any inclination towards cleanliness and comfort.

PREVENTION OF INFANT MORTALITY.

SUMMARY OF HEALTH VISITORS' WORK DURING THE YEAR 1919.

Total Infant visits	3,202
Total visits to children (1—5 group)	1,825
Total infant death visits	53
Total measles visits	640
Total pneumonia visits	110
Total ante-natal visits	63
Total home treatments	260
Total visits to Home Helps	23
Total Ophthalmia Neonatorum visits	47
Total still-birth visits	24
Total	6,247

There were two Health Visitors employed throughout the year. Considering that they had neither bicycles nor travelling allowance, and that the district, especially in Swinton division, is somewhat extensive in area, the record of visiting work is, I think, reasonable. In the earlier part of the year both Health Visitors attended both Wednesday afternoon and Thursday afternoon clinics, as the former clinic was conducted for infants under one year old and the latter for children over one. The work was rearranged so that a clinic for Swinton of all children not attending school was held on Wednesday, and a like clinic for Pendlebury was held on Thursday. It was then possible with the help obtained from voluntary workers to reduce the attendance of the Health Visitors at clinics to one half-day per week, each attending the clinic associated with her own district. Recently it has become necessary to have both health visitors at each clinic, so large has the attendance at each become. Another advantage of this arrangement is that it gives mothers the choice of two afternoons.

The number of visits paid by Health Visitors is dependent upon several factors. One has already been stated—*i.e.*, the area with which her work is concerned and the facilities for going about the area. To deny a nurse travelling expenses or bicycle allowance is a wilful reduction of work. Another factor which determines largely the number of visits

paid is the constitution of the population. If it be a population which is thoroughly conscious of its obligations a large number of visits can be paid which when tabulated may give the impression of much useful energy, but in reality are superfluous to a great extent. If, on the other hand, the population be that with a history of parental neglect, ignorance, and viciousness, a few visits often entail much labour, resourcefulness, and patience, and are productive of greater benefit, physical and educational, than the mass of easy visits of the type above indicated.

It has been the habit, and is the habit here, to take stock carefully of all the circumstances surrounding the birth and rearing of children, and I am convinced that the one prolonged visit is of much greater value than the several visits which mean no more than the obtaining of information necessary for record-keeping.

It has been the habit in years past to present the findings of the Health Visitors in tabular form, and for the purposes of comparison of a year in which dual improvement is in evidence—*i.e.*, lower death-rate and improving birth-rate,—with former years, these tables are again presented, and are supplemented by the additional information subjoined which was obtained concerning 509 of the births.

BIRTHS.

1st.	2nd.	3rd.	4th.	5th.	6th.	7th.	8th.	9th.	10th.	Over 10th.
145	99	84	52	37	20	16	25	16	6	9

The mothers who gave birth to these 509 children had previously had 159 children who were already dead and 39 still-births. The more favourable history associated with the births as a whole than that associated with infant deaths and still-births is to be noted.

The age of mothers at the births of the 509 infants and at marriage was :—

	Under 20.	20—25.	25—30.	30—35.	35—40.	Over 40.
At birth	1·3%	21·9%	29·6%	24·3%	19·05%	5·3%
At marriage	13·1%	61·1%	16·1%	6·09%	0·5%	—

93 mothers were occupied during pregnancy on work other than home work.

14 per cent. of the fathers were irregularly employed or were without employment.

17 per cent. of the babies were subnormal in weight at birth.

Nearly three-fourths of all infants were not provided with separate sleeping accommodation.

TABLE I. NOTIFICATION OF BIRTHS ACT.

Total Investigation during the first 14 days of life, 1919.

Entirely Breast Fed, 472.				Bottle Fed, 61.			
Legitimate, 452.		Illegitimate, 20.		Legitimate, 54.		Illegitimate, 7.	
Healthy, 430.	Unhealthy, 22.	Healthy, 17.	Unhealthy, 3.	Healthy, 28.	Unhealthy, 26.	Healthy, 3.	Unhealthy, 4.
50 106 376 8 83	7 6 18 3 13	3 10 17 2 3	1 1 3 0 1	7 7 22 2 8	10 6 21 0 5	1 0 3 0 0	2 1 4 0 0
Irregularity in feeding. Unsatisfactory sanitation. No separate sleeping. Family circumstances poor. Mother's health poor.	Irregularity in feeding. Unsatisfactory sanitation. No separate sleeping. Family circumstances poor. Mother's health poor.	Irregularity in feeding. Unsatisfactory sanitation. No separate sleeping. Family circumstances poor. Mother's health poor.	Irregularity in feeding. Unsatisfactory sanitation. No separate sleeping. Family circumstances poor. Mother's health poor.	Irregularity in feeding. Unsatisfactory sanitation. No separate sleeping. Family circumstances poor. Mother's health poor.	Irregularity in feeding. Unsatisfactory sanitation. No separate sleeping. Family circumstances poor. Mother's health poor.	Irregularity in feeding. Unsatisfactory sanitation. No separate sleeping. Family circumstances poor. Mother's health poor.	Irregularity in feeding. Unsatisfactory sanitation. No separate sleeping. Family circumstances poor. Mother's health poor.

TABLE II.
TOTAL INVESTIGATION DURING FIRST 14 DAYS OF LIFE OF INFANTS BORN IN 1918 AND RECEIVING PRIMARY VISIT IN 1919.

Entirely Breast Fed, 8.				Bottle Fed, 6.			
Legitimate, 8.		Illegitimate.		Legitimate, 6.		Illegitimate.	
Healthy.	Unhealthy.	Healthy.	Unhealthy.	Healthy.	Unhealthy.	Healthy.	Unhealthy.
— 1 7 — 1	None.	None.	None.	3 1 6 — 1	None.	None.	None.
Irregularity in feeding. Unsanitary sanitation. No separate sleeping. Family circumstances poor. Mother's health poor.				Irregularity in feeding. Unsanitary sanitation. No separate sleeping. Family circumstances poor. Mother's health poor.			

TABLE IIa.
SUBSEQUENT VISITS OF CHILDREN BORN IN 1918.

	Breast Fed.				Bottle Fed			
	Healthy.		Dead.		Healthy.		Unhealthy.	
	Total healthy.	Irregular feeding. Mother works. Insanitary home. No separate sleeping. Adverse antenatal circumstances.	Total unhealthy.	Irregular feeding. Mother works. Insanitary home. No separate sleeping. Adverse antenatal circumstances.	Total healthy.	Irregular feeding. Mother works. Insanitary home. No separate sleeping. Adverse antenatal circumstances.	Total unhealthy.	Irregular feeding. Mother works. Insanitary home. No separate sleeping. Adverse antenatal circumstances.
Visit at 3 months.								
Total Breast Fed 79	75	13 1 14 65 6	4	4 0 4 4 3	33	5 3 6 26 5	14	8 2 8 14 6
Total Bottle Fed 49					64	10 12 9 53 7	30	24 8 14 29 7
Visit at 6 months.								
Total Breast Fed 105	95	5 1 10 74 3	10	10 0 9 10 5	91	9 16 8 65 6	45	29 9 20 37 7
Total Bottle Fed 95					120	9 13 11 84 3	40	24 7 14 36 4
Visit at 9 months.								
Total Breast Fed 151	126	3 2 11 87 1	24	15 0 16 23 5	1	0 0 0 1 0	1	1 1 1 1 0
Total Bottle Fed 138					127	7 3 15 95 1	32	24 7 14 36 4
Visit at 12 months.								
Total Breast Fed 160	127	7 3 15 95 1	32	24 2 25 31 7	1	0 0 0 0 0	1	3 0 2 3 0
Total Bottle Fed 163								

Visit at 3 months.
Total Breast Fed 79
Total Bottle Fed 49

Visit at 6 months.
Total Breast Fed 105
Total Bottle Fed 95

Visit at 9 months.
Total Breast Fed 151
Total Bottle Fed 138

Visit at 12 months.
Total Breast Fed 160
Total Bottle Fed 163

OPHTHALMIA NEONATORUM.

Forty-seven visits were paid by the Health Visitors to nine cases of this affection notified last year. No permanent defect resulted in any case.

CENTRES.

As already stated, there were two consultation meetings held a week, unless the day of these meetings coincided with a public holiday.

The popularity of these meetings for a period suffered from a cause mentioned in last year's report, but later on their popularity increased, and at the present time they are being well attended.

To each meeting are now brought children not attending school (infants included). The premises for meeting are not very satisfactory, the arrangements for undressing and weighing being defective. This, it is to be hoped, will be remedied when the new centre is available.

The arrangement at the clinics is as follows: Infants attending for the first time, and all ailing infants are seen by the Medical Officer, together with such infants as mothers may desire to present to the doctor for some reason other than the aforementioned, such as the desire to obtain milk. Children attending the clinic are again seen when they reach the age of one year and afterwards at such periods as are necessary. Many are seen frequently on account of defect.

The records are passed on to the school medical inspection organisation when the child goes to school.

CLINIC WORK ACCOMPLISHED IN 1919.

No. of clinics held	98
Total attendances.....	2,512
No. of infant attendances	1,603
No. of fresh infant enrolments	195
No. of children aged one and over, attendances	909
No. of fresh enrolments	133
No. of infant medical consultations	621
No. of children aged one and over, medical consultations	371

The greater portion of the clinic work was accomplished during the latter part of the year, because of the acute drop in the clinic attendance as a result of the curtailment of dry milk supply when cows' milk became more plentiful.

A number of voluntary helpers attended the clinics throughout the year, and their help in weighing the babies and in dispensing teas for the mothers was invaluable. My thanks to these ladies is now expressed most cordially.

The defects found in infants were those concerned chiefly with nutrition and digestion. Those found in the older children followed, as would be expected, the lines of those found at school medical inspection. A tabulated statement of these defects is presented, together with a statement of the number of treatments afforded. These treatments have reference to children over one year old. In addition to these treatments were the following treatments for infants :—

Ear syringing, 6 ; simple enema administrations, 2 ; saline injection, 1 ; administration of eye lotion, 9 ; ointment dressings, 14 ; hernia dressings, 6 ; fomentations, 2 ; administration of grey powder, 10 ; milk peptonising, 6.

The above treatments were carried out by the Health Visitors, as were those at the clinic and at home shown in the tabular statement.

Dried milk, on the recommendation of the Medical Officer, was supplied to 76 persons.

Fresh cows' milk, on the recommendation of the Medical Officer, was supplied to 74 persons.

Virol, cod liver oil, malt, etc., was, on the recommendation of the Medical Officer, supplied to 38 persons.

TABLE OF DEFECTS FOUND ON EXAMINATION.

Age and sex.	Total Examined.	No Defect.	Subnormal Nutrition.	External Eye Disease or Squint.	Otorrhoea.	Heart and Circulation.	Bronchitis.	Other Chest Conditions.	Rickets.	Deformities.	Skin Diseases or Scabs.	Tubercular Glands.	Other Tubercular Diseases.	Nose, Lip, and complete Cleft Palate	Mentally Deficient.	Anæmia	Tonsils and Adenoids.	General Weakness.	Diarrhoea.	Hernia	Worms.	Whooping Cough.	Other Infectious Diseases.	Other Defects.	Total.	
1 and under 2 { B	30	3	10	1	3	1	3	1	3	1	6	1	1	1	0	2	4	1	0	3	0	0	1	0	5	47
G	18	2	8	1	1	0	1	2	3	0	2	1	0	0	0	0	0	2	0	2	0	0	0	0	1	24
2 and under 3 { B	24	3	9	2	1	0	5	0	4	1	6	1	0	0	0	5	4	0	3	0	0	0	0	0	5	46
G	35	5	11	2	1	1	3	3	3	2	3	0	0	0	0	4	2	0	2	0	2	0	0	2	41	
3 and under 4 { B	13	1	5	1	1	2	0	0	0	1	4	2	0	0	0	0	3	0	1	0	0	0	0	1	21	
G	15	2	5	1	2	2	0	3	1	2	1	0	0	0	0	1	1	0	2	0	1	0	0	1	23	
4 and under 5 { B	18	1	5	2	1	0	1	3	1	4	0	0	2	0	0	2	1	0	0	0	1	0	0	1	24	
G	18	3	6	0	0	1	2	3	0	0	0	0	1	0	1	2	1	0	0	0	2	0	0	4	23	
Total	171	20	59	10	10	7	15	15	15	11	22	5	4	0	3	18	15	0	13	0	6	1	0	20	249	

NUMBER TREATED AND WHERE TREATMENT OBTAINED.

*C	0	0	10	4	5	0	3	5	6	0	12	0	0	0	0	5	3	0	3	0	3	0	0	0	59
**P	0	0	3	4	2	0	1	2	3	4	8	2	2	0	0	6	1	0	6	0	3	0	0	2	49
***H	0	0	1	1	0	0	0	0	0	6	2	0	0	0	0	1	6	0	0	0	0	0	0	2	19
Total	0	0	14	9	7	0	4	7	9	10	22	2	2	0	0	12	10	0	9	0	6	0	0	4	127

*C = Clinic.

**P = At homes.

***H = Hospital.

In my last annual report I said that the scope of work in connection with maternity and child welfare so far undertaken at the time of writing the report was confined to house visiting of children and clinic advice and treatment of a simple nature, and I outlined what I considered to be the irreducible minimum of the district's needs in regard to maternity and child welfare. What is the position at present with regard to each of these needs now falls to be recorded :—

(1) A Scheme whereby the Midwives of the District will co-operate in the work.

A meeting of midwives, at which only four attended, was held during the year to express to them the need for their co-operation, especially in connection with the Council's proposed ante-natal clinic. Each midwife present expressed her desire to co-operate. Subsequently, all the midwives were circularised and asked to express in writing their willingness to co-operate in ante-natal work, and all expressed their approval of the undertaking and their wish to co-operate.

(2) Provision of Beds for Maternity Cases.

The Medical Officer of Health has been asked to make whatever arrangements he thinks necessary with St. Mary's Hospital for Women and Children, Manchester. This arrangement is not a satisfactory one, on account of this Hospital's provisions being rather different from those contemplated in the Maternity and Child Welfare Act. The Hospital authorities, moreover, inform me that a sum of £40 per annum will retain a bed, but that they can only guarantee to receive a patient in the event of a bed being vacant, which, according to their statement, is infrequent. A meeting was recently held in Manchester with neighbouring authorities, and the framing of a joint scheme was most favourably discussed.

(3) Provision of Medical Service for Maternity Cases.

The County Council of Lancashire undertakes this work.

(4) Provision of an Ante-natal Clinic.

This work will be commenced immediately.* A gynæcologist has been appointed who will hold consultations as soon as the few preparations necessary for the competent conduct of his work have been completed.

*Since the above was written the first Ante-natal Clinic has been held with encouraging results.

(5) Provision of Dental Treatment for Expectant and Nursing Mothers.

The carrying out of this work is dependent upon the opening of the new clinic premises.

(6) Popularising of the Child Clinics.

This work, at the time of writing, is achieving a considerable popularity with parents.

(7) Provision of Beds for Ailing Infants.

A cot has been retained at the Manchester Baby Hospital, Slade Lane, at an inclusive charge of £100 per annum, for some time, and has been continually occupied by district babies since retention.

(8) Provision of Nursing for Children.

It was hoped that ere this time arrangements would have been come to with the local Nursing Association for the nursing of sick children. Various factors have prevented the holding of a proposed meeting with the Executive of the Associations. One was the doubted continued existence of the Swinton Association. As the faltering animation of the Association was the result of lack of financial support it is to be hoped the Association realises that co-operation with the Council means income. The meeting must now be held at an early date.

(9) Provision of Home Helps for Maternity Cases.

This work is fully recognised, but its scope is dependent largely on the Council scheme of ante-natal work, which is only about to materialise.

(10) Arrangements for Convalescent Home Accommodation for Debilitated Children.

Nothing has yet been undertaken in this connection. The provision was, however, the subject of discussion at the joint meeting of authorities above referred to.

(11) Provision of Homes and Foster Mothers for Illegitimate Children.

No definite scheme has been formulated.

III. Infectious Diseases.

The year has, unfortunately, been characterised by serious outbreaks of infectious disease, and with added duties consequent upon the compulsory notification of malaria and pneumonia, the staff of inspectors has been in no small measure occupied in the investigation of individual cases of infection and in efforts involved in removal to hospital of infected persons, supervision of home isolation, and disinfection of houses and effects.

The visiting of measles cases was undertaken by the Health Visitors, as also was the visiting of cases of pneumonia until the reorganisation of the work on completion of the permanent staff of inspectors, when pneumonia visiting was undertaken by the latter.

With regard to malaria investigation it was found that all notifications with one exception were concerned with demobilised soldiers. The only exception proved, on investigation by Lt.-Col. James, of the Ministry of Health, to be an affection which was not due to the malaria parasite. No locally contracted case occurred in the district, and it is matter for debate whether many of the attacks which occasioned notification in demobilised soldiers were genuine malarial attacks. The action taken with regard to all cases notified was to endeavour to obtain a form of treatment requisite for prophylactic and curative purposes. I do not think it can be expected that in such a district as this a system of protection by mosquito netting can be put into operation. Nor does there appear to have been any need for such protection during 1919. Systematic search for mosquitos was made in each home concerned in a notification, and none were found. Moreover, this investigation was conducted by an inspector whose experience of mosquito work in Macedonia is an earnest of his capability to carry out this work.

1,342 notifications of the various notifiable infections were received during the year. Based on a population of 30,600 persons this means that 43 persons per 1,000 were discovered during the year to be suffering from notifiable infectious disease. The proportion is large (1 in every 23 persons in the district), but as four-fifths of total infection was represented by mild attacks of scarlet fever and measles in persons under the age of 15, mortality and economic disturbance were relatively low.

Welcome features of the returns are the diminished incidence of tuberculosis and enteric fever, as represented by notification, and the complete absence of those serious communicable diseases of the central nervous system, which have become so definitely differentiated as to require separate nomenclature and notification.

Comparative rates for all notifiable infections are impossible for recent years inasmuch as the list is continually being added to. It is, therefore, necessary for comparative purposes to include in any statement only those affections embraced in the Act of 1889. Such a comparison gives the following figures for the whole district :—

1917.		1918.		1919.
4·8	....	3·1	....	12·2

The increase in 1919 was due, of course, to the large incidence of Scarlet Fever.

The rates for the various wards were as follows :—

	1917.		1918.		1919.
Victoria Park ..	5·5	....	1·9	....	7·4
Old Park	3·1	....	2·04	....	8·7
Moorside	3·4	....	1·6	....	12·5
Newtown	4·3	....	4·1	....	12·4
Market	5·5	....	2·9	....	21·7
East.....	3·3	....	4·3	....	9·8

It will be noted that the incidence of disease is most marked in Market Ward, where the population is at its densest. In connection with the scarlet fever outbreak Market Ward provided three-tenths of the total cases. On the other hand, the incidence of measles was most marked in Old Park and Victoria Park Wards, and least marked in Market and Moorside Wards. Old Park Ward provided nearly four times as many cases of measles as did Market Ward. The Old Park measles outbreak is an example of how effective an infant school may become in the propagation of a measles epidemic.

SCARLET FEVER.

Seventeen years have elapsed since scarlet fever was so prevalent as in 1919. In the year 1902, 373 cases were recorded. The incidence per 1,000 population of the year 1902 was 13·7. For the year 1919 it was 10·5. The incidence of scarlet fever in each of the wards during the last three years is shown in the subjoined table of rates :—

Ward.	1917.		Rates. 1918.		1919.
Victoria Park ..	4.2	....	1.1	....	5.8
Old Park	0.7	....	1.2	....	7.8
Moorside	1.8	....	0.2	....	10.7
Newtown	1.7	....	1.5	....	10.8
Market	2.3	....	1.1	....	19.7
East.....	1.6	....	1.0	....	8.1

Scarlet fever became epidemic in the district as early as the end of February. The word epidemic is perhaps used here in a wrong sense. The word epidemic implies that there was a simultaneousness about the outbreak. This, in reality, was not the case. The outbreak starting, as stated, at the end of February contributed cases throughout the remainder of the year, and scarlet fever was still incident in the district without modification of rate at the beginning of 1920.

From the week ended February 22nd to the week ended December 27th, a period of 45 weeks, 316 cases of scarlet fever occurred, and incidence was uninterrupted, in so far as weekly periods are concerned, throughout. The average number of cases per week was 7, or 1 a day. The fluctuations per week were between 1 and 16.

It is therefore apparent that no factor which would be likely to cause a simultaneous outbreak was in operation. This of course eliminates milk as a factor. Investigation into the milk supply associated with each case proved clearly early in the outbreak that a case against milk could not be made out.

SCARLET FEVER.
WEEKLY TOTALS FOR YEAR 1919.

Jan. 4	—		July 5	3	
11	3		12	7	
18	—		19	2	
25	—		26	5	
Feb. 1	—		Aug. 2	7	
8	1		9	3	Midsummer Holidays
15	—		16	4	
22	5		23	4	
Mar. 1	4	} Schools closed on account of Influenza epidemic	30	13	
8	4		Sept. 6	8	
15	8		13	12	
22	3		20	5	} Schools closed for Peace week
29	6		27	6	
April 5	8		Oct. 4	3	
12	10		11	1	
19	8	} Schools closed, Easter Holiday	18	10	
26	4		25	6	
May 3	4	} St. Stephen's closed for Measles	Nov. 1	5	
10	5		8	7	
17	7		15	8	
24	11		22	13	
31	9		29	15	
June 7	1		Dec. 6	12	
14	7	} Schools closed, Whitsuntide Holiday	13	10	
21	10		20	16	} Christmas and New Year Holidays
28	7		27	10	
			31	4	

Grand total for year 1919 .. 324.

The above table is given with the purpose of showing the weekly incidence as a complete story for the year, and also of showing the effect of schools upon occurrence. This table should be studied in conjunction with the subjoined table of age and sex distribution.

AGE AND SEX DISTRIBUTION IN SCARLET FEVER, YEAR 1919.

SEX.	AGE.														Adults.		Total.	
	Under one year.	One year.	Two years.	Three years.	Four years.	Five years.	Six years.	Seven years.	Eight years.	Nine years.	Ten years.	Eleven years.	Twelve years.	Thirteen years.	Fourteen years.	15 to 25 years.		25 to 45 years.
Male	—	1	7	10	9	22	11	9	9	12	11	6	9	8	7	10	1	142
Female ..	1	—	5	8	11	20	12	19	14	13	14	17	18	7	6	13	4	182
	1	1	12	18	20	42	23	28	23	25	25	23	27	15	13	23	5	324

Taking 5 to 15 as the period of school life, it is found that the incidence of scarlet fever in these age periods was as under. (The calculation is a rough one, being based on the figures for age and sex distribution of last census) :—

Before School Life.		During School Life.		After School Life.	
Males.	Females.	Males.	Females.	Males.	Females.
15·8	14·9	25·5	26·5	0·6	0·9

The figures for the period after school life may be ignored. As a general rule even if a person is not protected by previous attack by the time the age of 14 is reached scarlet fever is unlikely to develop. The figures for the period before school age are, of course, of little value for inferential purposes, inasmuch as children go to school before they are five years of age, and if not attending school they may have been exposed to brothers and sisters suffering from scarlet fever in their homes. As a matter of fact, the greatest incidence during this period was between the ages of 3—5, and many children of 3 and 4 years of age go to school in the district. There is, therefore, here evidence that schools are directly instrumental in spreading infection. On the other hand, if reference be now made to the tables of weekly totals it will be found that school closure does not appear to have had any outstanding influence on the outbreak, for although between August 29th and September 6th (9 days) a period covering the two extremes of incubation associated with exposure to infection, on the day of school opening after the summer holidays, 15 cases of scarlet fever were notified, 15 cases occurred in the week ending November 29th, and 16 cases occurred in the week ending December 20th, periods unassociated with re-opening after school closure.

16 cases of scarlet fever occurred in children who were under school age and who lived in homes from which no child went to school. What proportion of such children there are in the district cannot, of course, be readily ascertained.

128 cases of scarlet fever were removed to Ladywell Sanatorium during the year. Their removal was occasioned more by home circumstances connected with the nursing of the cases than by hope that limitation of spread might thereby be effected. When a case of scarlet fever occurs in a house consisting of two rooms up and two rooms down, in which a family of six or more persons reside, in my belief there is no alternative to removal to the sanatorium in every case.

A statement of the after events in connection with sanatorium and home-nursed cases is presented below :—

	Sanatorium Cases.		Home Isolated Cases.
Total number.....	122	....	202
Secondary cases	30	....	40
Cases occurring in homes one month after return of a case from sanatorium, and within one month of release from quaran- tine of a home-nursed case...	9	....	4

The question arises as to what is the possible explanation of the considerable increase of incidence of scarlet fever during 1919.

The history of this malady in the district for the last twenty-five years has been one of decreasing prevalence. In 1895 the attack rate rose to 19.5. Thereafter for a period of seven years there was relative immunity. Then came the outbreak in 1902 which, however, did not affect the community in the proportion of the 1895 epidemic. Again came a period of diminished frequency, and again a year standing out as one of maximum incidence in a period of years of relative immunity. On this occasion again there was diminished attack rate comparatively with the former years of maximum rate. Next came a period of freedom, followed by a year of maximum incidence, characterised by still further diminished rate. That year was 1916. If history had repeated itself at the present time a period of relative immunity would be expected. However, in 1919 came a sudden upward curve of the wave line of incidence,

not in the form of a true epidemic, sudden in outbreak and short in duration, but spread out over a period of many months. The explanation then must be sought for in the natural history of scarlet fever in the country as a whole during the period just reviewed locally. That history is one of diminished prevalence with maximum waves of lessening height at intervals of years more or less regular, with concurrent lessening severity. It naturally has come about that the population has become increasingly less protected by previous attack and the period has arrived, governed no doubt by other factors not at present apparent, when a susceptible population has yielded to attack by a mild form of affection, and the increase of cases has been aided by the very mildness of attack, through undetected infectors being in a position to infect others.

The death-rate for 1919 (per 1,000,000 population) was	294.1
Do. do. do. (per 1,000 cases) was	27.7

DIPHTHERIA.

Such a small number of diphtheria cases as 24, which was the number of notifications of that malady received last year, calls for little comment. Positive information was received concerning 15 specimens of material from throat swabs sent for examination to Manchester University. Many swabs were taken from school children with sore throats, but only one child afforded a positive result. All cases of school children isolated at home, and all contacts were swabbed before return to school.

ENTERIC FEVER.

Information concerning three cases only of enteric fever was received last year. The rate per 1,000 population was 0.09. This is the smallest number of cases recorded in the district during a period for which records are available.

In connection with this disease enough has been said in former reports concerning the desirableness of conversion of middens, paving of streets, and prevention of fly-breeding. These activities form an important part, although not all, of the campaign against the spread of intestinal affections.

PNEUMONIA.

Acute Primary Pneumonia and acute Influenzal Pneumonia became notifiable on the first day of March, 1919. Between that date and December 31st 72 cases of the former affection were notified, and 32 of the

latter. The purpose of the Order of January 7th, 1919, was to cause enquiry to be made into the causes, extent of affection, etc., of a form of chest affection which in the industrial districts of the North of England has been productive of death-rates and invalidity-rates far exceeding those of residential urban districts and rural districts.

The addition of any affection to the category of diseases which a local authority causes to be investigated is productive of increasing evidence that the scope for investigation is almost limitless. The private practitioner in his ministrations to the poor and to the working classes is in the peculiar position of not being at present part of the machinery of the local Public Health Administration, whilst possessing knowledge that must be infinitely greater than that of the officials of the local authority, knowledge which is valuable from the standpoint of associating social conditions with disease, and at the same time valuable from the clinical standpoint. Often in his daily work the doctor must encounter such cases as the help of the local authority would benefit, and yet beyond the placing of a disease upon the list of notifiable affections his co-operation has not hitherto been enlisted. Even when a notification of infectious disease is made, all that is elicited is identity. It is a process of ignoring a valuable source of information and making use of a source distinctly less qualified to establish the facts upon which disease causation is dependent.

Now the use of this latter source in the study of pneumonia is not a very happy inspiration. The Sanitary Inspector, in the investigation that is commonly carried out in connection with scarlet fever, the Health Visitor, in the investigation that is commonly carried out in connection with an infant death, or a still-birth, are probably carrying out their missions in each case in a sufficiently effective manner, but neither, I think, is possessed of sufficient imagination to carry out work on the results of which it is hoped to base measures for the eradication of disease. At least this much can be said, that the information of the medical attendant should be of paramount importance.

The notification fee of 2s. 6d. was reduced at a time when correct notification was most needful. Now, at a time when the value of 2s. 6d. is less than half of what it was, the general practitioner is affronted by the allurements offered him that there will be a magnanimous return to this colossal disbursement "when the war is over." There is in this transaction an earnest of how far removed are the powers that be from properly estimating the value of a true co-ordination of the interests of the general practitioner and the Medical Officer of Health.

From investigation of the pneumonias made last year it was found that the maximum incidence was between the ages of 1 and 15, a significant fact in itself. Between these ages there occurred last year 735 cases of measles. Moreover, the fact is established that acute pneumonia is most prevalent in the age period 35—60, whereas broncho-pneumonia is most prevalent in infants under one year of age. Less than quarter of the total of 72 cases occurred in these age periods.

A table of the age and sex distribution of all cases of acute primary pneumonia and acute influenzal pneumonia notified to the Medical Officer of Health is presented herewith :—

PRIMARY PNEUMONIA.

	Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and Upwards.
Male	2	10	17	5	10	3	—
Female	1	5	11	2	1	4	1
Total ..	3	15	28	7	11	7	1

INFLUENZAL PNEUMONIA.

	Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and Upwards.
Male	—	3	—	3	7	6	2
Female	—	1	2	2	3	2	1
Total ..	—	4	2	5	10	8	3

Facts elicited by the Health Visitors in their visits to homes in which cases of pneumonia occurred were that frequently the essentials to life—food and clothing—were wanting at a time they were most needed.

MEASLES.

1919 was the last year in which measles was compulsorily notifiable. Henceforward local authorities will base their action upon information derived from various channels, but it is unlikely that they will have precise information as to the extent of the affection. It is, however, a well-established fact that no system of notification in measles gives precise information of extent, and it may well have been that the disbursement of shillings was not justifiable, and with the approach of a

MEASLES NOTIFIED DURING THE YEAR 1919.
WEEK ENDING TOTALS.

Week Ending.	Total.	
January 4	—	
" 11	—	
" 18	1	
" 25	—	
February 1	—	
" 8	—	
" 15	3	
" 22	—	
March 1	5	} Schools closed for Influenza epidemic.
" 8	4	
" 15	8	
" 22	8	
" 29	1	
April 5	5	
" 12	28	
" 19	61	} Schools closed for Easter Holidays.
" 26	81	
May 3	56	} St. Stephen's closed for Measles epidemic.
" 10	28	
" 17	32	
" 24	26	
" 31	40	
June 7	26	
" 14	12	} Schools closed for Whitsuntide Holidays.
" 21	16	
" 28	10	
July 5	17	
" 12	13	
" 19	27	
" 26	23	
August 2	21	} Midsummer Holidays.
" 9	26	
" 16	25	
" 23	6	
" 30	14	
September 6	5	
" 13	12	
" 20	4	} Schools closed for Peace week
" 27	5	
October 4	6	
" 11	11	
" 18	8	
" 25	16	
November 1	8	
" 8	9	
" 15	13	
" 22	8	
" 29	5	
December 6	7	
" 13	3	
" 20	7	} Christmas and New Year Holidays.
" 27	4	
" 31	8	
Total	762	Cases notified.

time when restitution of the 2s. 6d. fee could no longer be delayed the scrapping of a system which experience had shown to be unproductive of benefit became essential.

762 cases of measles were notified in Swinton and Pendlebury last year. A study of the table of incidence of the disease in weekly periods shows that from the beginning of April until the end of May measles was very prevalent. The epidemic appears to have had its origin in St. Stephen's Infant School. It will be observed how rapidly cases multiplied during the weeks ended April 5th, 12th, 19th, and 26th. The schools were closed for Easter holidays between 18th and 28th April. On the latter date they reopened with the exception of St. Stephen's School, which was kept closed a week longer with a view to combating the measles outbreak. It will be seen that the week ended May 10th, which was the week during which the effect of the school closure might be expected to be felt, there was a diminished contribution to the number of notifications received.

640 measles visits were made by the Council's staff. Happily, complications were few in proportion to the number attacked, which must have been considerably greater than is represented by notifications. No nursing at the instance of the Council or by the nurses of the local Nursing Associations was undertaken. A proposal has been made to meet representatives of the local Nursing Associations with a view to attempting co-ordination of work. It has, however, been pointed out that a rule of the Associations, which the Associations are unwilling to waive, is that no member of their staffs shall attend an infectious case. If this rule be carried to its logical conclusion there will be left but a small field for the Associations' activities.

The death-rate from measles in 1919 was 5.2 per 1,000 cases, and 130.7 per 1,000,000 population.

TUBERCULOSIS.

The usual table of notifications of tuberculosis is submitted.

The diminution in the number of cases of pulmonary tuberculosis will be observed with satisfaction. What it indicates is not, perhaps, so much a decrease as more perfected diagnosis.

A table of the subsequent history of notified cases presented last year for the first time is again presented this year, and brought up to date.

In a study of that table (see page 43) the principal points to be noted are :—

608 cases of pulmonary tuberculosis have been notified in seven years, or 20 per 1,000 population. The average yearly notifications were 86, or 2·8 per 1,000 population.

197 of the 608 cases notified during seven years are dead, or 32 per cent.

107 of the 197 deaths occurred in the year of notification, but whereas the percentage of deaths in the year of notification of cases who had not received any sanatorium treatment was 66, it was 18 for those who had received sanatorium treatment.

I do not think this must be taken as indicating anything more than delay of notification in a considerable number of cases until the disease had become well established.

Of the 608 cases originally notified 244 cases have received sanatorium treatment at one period or other of illness. Therefore 364 cases have not received any sanatorium treatment.

Of the 244 sanatorium cases 49, or 20 per cent., are dead, the greatest percentage (7 per cent.) of deaths having taken place in the third year after notification. Of the 364 non-sanatorium cases 148, or 40 per cent., are dead, and of the cases dead 66 per cent. died in the year of notification.

A rapid diminution in the number of deaths of non-sanatorium cases after the year of notification is in evidence, whereas increase in the number of deaths in the years subsequent to notification is in evidence in the case of sanatorium-treated cases.

411 persons who have been notified at one period or other during seven years as suffering from pulmonary tuberculosis are alive to-day. Of these 195 have received sanatorium treatment, and 216 have not received sanatorium treatment.

It is presumed that the diagnosis in the case of the 195 persons who have been admitted to sanatoria received more confirmation than did that of the 216 persons who did not come under observation at sanatoria. What proportion of the 216 cases have really ever had tuberculosis is difficult to say. The marked diminution in the number of deaths as the years have accumulated since notification of these non-sanatorium cases gives rise to reasonable doubt as to the correctness of original diagnosis.

TABLE OF NOTIFICATION OF AND DEATHS FROM PULMONARY TUBERCULOSIS,
From 1913 to 1919 Inclusive.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Year notified.	Number of Cases notified.	Number of Cases admitted to Sanatorium.	Total Admitted to Sanatorium	Year of Death of Patients who have received Sanatorium Treatment.	Total.	Year of Death of Patients who have not received Sanatorium Treatment.	Total.	Total Deaths of Patients Notified from 1913 to 1919, Inclusive.	Total.	Total No. of Persons still Alive who have been notified as suffering from Pulmonary Tuberculosis.
		1913 1914 1915 1916 1917 1918 1919	1913 1914 1915 1916 1917 1918 1919	1913 1914 1915 1916 1917 1918 1919	1913 1914 1915 1916 1917 1918 1919	1913 1914 1915 1916 1917 1918 1919	1913 1914 1915 1916 1917 1918 1919	1913 1914 1915 1916 1917 1918 1919	1913 1914 1915 1916 1917 1918 1919	1913 1914 1915 1916 1917 1918 1919
1913	111	10	34	4	14	3	16	3	30	81
1914	101	8	22	1	8	22	33	23	41	60
1915	90	21	34	2	9	16	25	18	34	56
1916	93	27	41	2	9	16	23	—	32	61
1917	87	44	51	2	5	17	26	—	31	56
1918	80	39	49	2	4	—	16	—	20	60
1919	46	—	13	—	—	—	9	—	9	37
Totals..	698	10 20 27 42 72 48 25	244	5 8 4 11 15 6 49	3 31 23 25 24 27 15 148	3 31 23 25 24 27 15 148	3 36 31 29 35 42 21 197	3 36 31 29 35 42 21 197	411	

* One death certified as due to Scarlet Fever.

The main facts brought out are that lateness of diagnosis is a factor which militates against success in arrest, and that sanatoria would certainly appear to prolong life. In connection with the former it will be observed that nine cases of pulmonary tuberculosis (46 cases were notified in 1919) were evidently too advanced to be considered as likely to benefit from removal to sanatorium, and are already dead. Two of these cases were not notified at any time.

Dr. Jessel, Senior Tuberculosis Officer, Lancashire County Council, has kindly supplied the subjoined figures with reference to the local activities of the Lancashire County scheme of work. He has also been good enough to furnish a few notes on the working of the scheme locally, which are presented herewith.

1919.

SWINTON AND PENDLEBURY DISTRICT.

(a) No. of cases admitted to:—

1. Sanatoria	42
2. Pulmonary Hospitals	11
3. General Hospitals	4

(b) No. of cases granted domiciliary treatment 111

(c) No. of cases granted dispensary treatment 134

(d) No. of cases under supervision on 31st December,
1919..... 252

	Insured	Non-Insured	Total
Pulmonary.....	110	113	223
Non-Pulmonary.....	7	22	29
Totals	117	135	252

NOTES BY DR. JESSEL.

SWINTON AND PENDLEBURY DISTRICT.

On the 1st of September, 1919, the revised dispensary arrangements in connection with the County Council's scheme came into operation. Dr. Jessel, one of the Senior Tuberculosis Officers, took over the Swinton District as part of his extended area. Arrangements were made for the Dispensary to be opened on two days per week, namely, on Mondays

and Wednesdays, at 10 o'clock, instead of on one day per week as previously. Arrangements have been made for close co-operation between the Medical Officer of Health and the Tuberculosis Officers of the County Council. Particulars of notifications are sent by the former to the latter weekly, so that patients may be brought under treatment as soon as their disease has been notified. Arrangements have also been made whereby school children suspected to be suffering from tuberculosis are referred to the Consultant Tuberculosis Officer or his assistant with a view to a definite diagnosis being made and the question of exclusion from school decided upon and treatment arranged if desired. Owing to the appointment of additional County Council Tuberculosis Health Visitors, one Dispensary Sister now devotes her whole time to patients in Swinton and Pendlebury, so that patients receiving treatment at home can receive more effective supervision of the routine treatment as well as actual nursing, dressings, etc. An increasing number of patients are being referred to the Consultant Tuberculosis Officer by the Medical Practitioners of the district for diagnosis, etc. With the close and cordial co-operation between the Dispensary organisation and the Health Department of Swinton and the local Medical Practitioners, it is hoped to bring patients under treatment at an increasingly earlier stage of the disease, while the prospects of arrest or restoration to some degree of working capacity are good.

LOCAL AUTHORITIES' ACTION WITH REGARD TO TUBERCULOSIS.

An arrangement has been come to between the Senior Tuberculosis Officer and the Medical Officer of Health of Swinton and Pendlebury that all matters affecting treatment of cases will be the concern of the County Authorities, and all matters concerning prevention, disinfection, defect of environment, etc., will be the concern of the local Sanitary Authority. It will now be possible to carry out the periodic inspection of houses in which are lodged tubercular cases, and to provide for periodic disinfection of bedding and bedroom, activities which have never before been possible owing to deficiency of staff.

Report of Laboratory Work Carried out by Professor Delapine and his Staff during 1919.

	Total.	Positive.
Diphtheria Swabs	93	15
Sputum	25	4
Blood for Typhoid	4	—
Blood for Paratyphoid A	1	—
Blood for Paratyphoid B	1	—
Urine for Tubercle	1	—

IV. Sanitary Circumstances.

STAFF OF INSPECTORS.

At the beginning of 1919 the staff in the Sanitary Office consisted of the Inspector of Nuisances and a clerk. Two Inspectors were still on military service. The staff was, of course, totally inadequate to deal with anything except the daily urgencies. Systematic inspection, which had never been carried out even in pre-war times was out of the question. Unremedied nuisances accumulated to such an extent that not only was their abatement difficult on account of lack of the necessary labour, but their proper supervision was impossible. Mr. Bleakley, the Inspector of Nuisances, in attempting to perform more work than could possibly be undertaken by one inspector without physical injury, broke down under the strain, and was an invalid and absent from the Council's service from February 20th until April 16th. During the period when he was the sole inspector on duty he had to seek the assistance in certain inspectorial work of Mr. Flower, clerk in his department. Mr. Flower possesses no experience outside the office, and has no qualification for inspectorial work. When, therefore, Mr. Bleakley fell ill, Mr. Flower was, for a time, the sole representative of the Sanitary Inspectors' department on duty. It goes without saying that at a time when the district's condition called for concentrated effort it was in a position of almost complete inertia so far as sanitary work was concerned. The services of a temporary inspector were then obtained. He commenced duty on March 13th. On April 16th Mr. Bleakley returned to duty, but nothing was yet possible beyond the daily urgencies and the fuller investigation of accumulated nuisances and an attempt at their systematic abatement. As yet no routine inspection of premises was possible, and house to house visitation was altogether out of the question. So defective in cleanliness had many houses become that it was apparent that systematic house to house inspection for the purposes of investigation and remedy was necessary. Accordingly, on June 17th a second temporary inspector commenced duty in order that this work might be carried out. His findings revealed the fact that a considerable proportion of the district housing was in a condition which called for action, and it soon was discovered that if any attempt was to be made at competent conduct of the sanitary work of the district the pre-war staff of inspectors would require supplementation. The need was rendered the more

urgent when the Government called for a housing survey; and the rapid and altogether imperfect survey which only was possible revealed the fact that not only was a large proportion of the district housing in a state of uncleanness and disrepair, but many houses were dilapidated beyond hope of salvation, constituting with neighbouring structures areas which could reasonably be dealt with under Part I. of the Housing of the Working Classes Act. These areas, of course, required careful and detailed inspection, which could only be undertaken were staff available. The time had, in fact, arrived to make representation to the Council that the staff of inspectors should consist of the pre-war staff of an inspector of nuisances and two assistant sanitary inspectors, supplemented by two additional assistants, and that of the four assistants two should be engaged on general sanitary work and two on housing, the two former having districts, and that Mr. Bleakley should exercise mainly supervisory duties together with administration of the cleansing department. After a somewhat protracted debate the recommendation of increase was approved. It will now be possible to undertake work which never before in the district's history has been undertaken. In short, under the new regime it is intended to look in a systematic way for defects instead of waiting to be told of them, or dealing with them in a haphazard and fortuitous manner. The system has already justified itself in the discovery of defects which would not have come to light but for systematic work. Another activity, hitherto impossible, which it is hoped will be undertaken by the increased sanitary staff, is inspection of property which has been repaired after the Council's representations for the purpose of safeguarding owners from malicious and unjustifiable damage and soiling by careless tenants.

WORK OF SANITARY INSPECTORS.

The work accomplished by the sanitary inspectors is set out in two accompanying tabular statements. The first statement has reference to work in connection with infectious disease prevention; the other statement refers to general inspectorial work and the service of notices in connection therewith. It is necessary to explain why the figures in columns 11, 12, and 13 appear to be but a small proportion of the figures in column 3, the reason being that abatement of a nuisance usually takes a considerable time, especially where owners fail to comply until service of final or statutory notices. The inspections in column 2 were mostly done during the latter part of the year. Sufficient time has, therefore, not elapsed to permit of the presentation of figures in columns 11, 12, and 13 which would have been expected had sanitary inspectorial work been uniform throughout the year. Another factor which lessened the amount of abatement obtained was the shortage of labour and material.

NATURE OF INSPECTIONS.	Primary Inspections.	Re-inspections.	Rooms Disinfected.	Rooms Sprayed.	Bedding, etc., Disinfected.	No. of Cases Removed to Hospital.	Notices Sent to			Remarks.
							Elementary Schools.	School Attendance Officer.	Parents.	
Scarlet Fever.....	324	418	287	297	—	122	291	482	225	No. of School-rooms Sprayed 232.
Diphtheria	22	17	16	18	—	4	14	24	12	
Enteric Fever	3	7	8	2	2	2	—	—	—	
Puerperal Fever	1	5	—	—	—	—	—	—	—	
Scabies	3	1	3	—	33	—	—	—	—	
Cerebro-Spinal Fever	—	—	—	—	—	—	—	—	—	
Acute Poliomyelitis	—	2	—	—	—	—	—	—	—	
Erysipelas	1	1	—	—	—	—	—	—	—	
Tuberculosis { Pulmonary	46	30	9	20	60	—	—	—	—	
{ Other	11	—	—	—	—	—	—	—	—	
Smallpox (contacts only)	5	61	—	—	—	—	—	—	—	
Other Diseases	—	—	—	—	30	—	—	—	—	
Cancer	1	1	1	—	—	—	—	—	—	
Malaria	35	8	—	—	—	—	—	—	—	
Dysentery	1	1	—	—	—	—	—	—	—	
Influenzal Pneumonia	—	1	—	—	33	—	—	—	—	
Acute Primary Pneumonia *	3	3	—	—	—	—	—	—	—	
Totals	450	556	324	337	158	128	305	506	237	

NUISANCES, ETC.	No. of Premises Inspected.	No. of Premises on which Sanitary Defects were found.	No. of Re-inspections.	No. of Notices Served.						No. of Nuisances, etc., Abated after Notice.			
				Verbal to		Informal to		Statutory to		Verbal.	Informal.	Statutory.	Houses Sprayed
				Owner.	Occupier.	Owner.	Occupier.	Owner.	Occupier.				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Dirty and Verminous Houses	53	45	39	1	8	16	—	—	—	1	2	—	6
Overcrowding	140	2	1	—	2	—	—	—	—	1	—	—	—
Defective Roofing	54	54	36	1	—	24	—	—	—	1	13	—	—
" " Gutters	128	70	175	3	—	39	2	22	—	9	16	—	—
" " Spouting	38	31	26	—	—	20	—	—	—	1	12	—	—
" " Floors	10	10	3	—	—	5	—	—	—	—	2	—	—
" " Window Cords	31	17	5	—	—	26	—	—	—	—	3	—	—
" " Ashbins	451	426	411	—	—	49	—	269	—	3	10	179	—
" " Privies and Ashpits	85	48	32	—	—	5	—	4	—	2	3	—	—
" " W.C. Pedestals	43	24	35	3	1	35	—	—	—	13	19	—	—
" " W.C. Fittings	69	60	68	1	—	31	—	—	—	1	47	—	—
" " Water Supply Pipes	38	37	33	1	—	19	—	—	—	1	23	—	—
" " Sink Waste Pipes	8	5	3	—	—	6	—	—	—	—	3	—	—
" " Surface of Yards	31	18	60	—	—	10	—	5	—	14	2	—	—
" " Structural Condition	39	65	82	2	4	40	—	1	—	2	18	—	—
Blocked Drains	65	65	85	16	2	31	—	1	—	12	30	—	—
" " W.C.'s	51	39	10	8	12	8	—	—	—	22	3	—	—
" " Gullies	101	84	67	30	7	13	—	—	—	53	11	—	—
" " Sewers	9	9	3	1	—	—	—	—	—	1	—	—	—
" Stables and where Animals and Poultry kept	21	2	12	1	2	—	—	—	—	1	—	—	—
Accumulation of Rubbish	12	10	7	—	5	—	—	—	—	5	—	—	—
Slaughter-houses	1	1	—	—	—	—	—	—	—	—	—	—	—
Factory and Workshops	237	1	15	2	2	—	—	—	—	—	—	—	—
Bakehouses	21	3	28	3	2	—	—	—	—	—	—	—	—
Common Lodging Houses	—	—	7	—	—	—	—	—	—	—	—	—	—
Complaints Investigated	36	9	—	—	—	3	—	—	—	—	—	—	—
Dairies and Cowsheds	16	—	7	—	—	—	—	—	—	—	—	—	—
Miscellaneous	82	15	86	11	—	1	—	—	—	3	—	—	—
Smoke Observations	4	—	—	—	—	1	—	—	—	—	—	—	—
Outworkers	2	—	8	—	—	—	—	—	—	—	—	—	—
Conversions	38	—	9	—	—	—	—	—	—	3	—	—	—
Testing and Tracing of Existing Drains	27	—	2	—	—	—	—	—	—	—	—	—	—
Water Tests to New Drains	4	—	—	—	—	—	—	—	—	—	—	—	—
Reconstructing House Drains	1	—	2	—	—	—	—	—	—	—	—	—	—
Totals	1800	1150	1349	83	47	382	2	302	—	149	237	179	6

WATER SUPPLY.

The water supply of the district is obtained from the Manchester Corporation supply, which comes from Thirlmere. The supply is a constant one. Every house in the district is supplied directly from the main. There is no household storage.

RIVERS AND STREAMS.

The river Irwell forms one of the boundaries of the district. Into the Irwell discharges the overflow of three cesspools in connection with 42 houses in Langley Road.

The question of this contamination of the Irwell is not serious when one takes into account the condition of the river. Trade effluents, one of which is carried to the river in the same drain which carries the overflow from the cesspools in Langley Road, are sufficiently inimical to the lower forms of life as to secure by their action freedom from bacterial activity. Nevertheless the contamination of any stream by any form of effluent which is not rendered as innocuous as possible from every point of view is very undesirable.

DRAINAGE AND SEWERAGE.

In consequence of the Treasury's refusal to permit public expenditure in which loans were involved after the outbreak of war in 1914, the scheme for reconstruction of sewers, described in the report of that year, had to be postponed, even although the Local Government Board's inquiry affirmed the necessity of the work and sanctioned the obtaining of a loan of £10,875 to carry it out.

From 1914, therefore, until 1919 the district sewerage has undergone no reconstructive work, and has undergone further dilapidation on account of colliery subsidence.

In the month of October last, after heavy rainfall, sewage was found to be backing up the gulleys of a private house in Chorley Road. On investigation the Surveyor found that the level of the main sewer had altered to such an extent that there was no longer a fall, and that in consequence sewage had dammed up in sufficient amount to cause the nuisance already mentioned. The matter was one of urgency, and the question at once arose whether the work proposed in the scheme of 1914 should be carried out or whether a smaller scheme, to afford immediate relief to the defect and therefore one which could be carried out more expeditiously, was preferable. When the matter of cost was investigated

it was found that the original scheme for which the estimate made in 1914 was roughly £10,000 would now cost £35,000. The inhibitory influence of the Treasury in 1914 was thus likely to cost the Council £25,000 if the original scheme was carried out. It was resolved that a lesser scheme which in reality is part of the whole original scheme should be carried out, and this work is now in progress.

There is no assurance that colliery subsidence will not dislocate new sewerage work as it has done existing sewerage, and at a time when subsidence is manifestly active it does not appear that more than the repair of gross defects is called for. Such gross defects will no doubt appear from time to time as long as coal is "got" in the district.

Defective sewers are probably less inimical to health than are defective house drains so long as backing up of sewage does not force house gully traps, but it cannot for a moment be contended that there is not serious nuisance and menace from defective sewerage. The saturation of the soil in the neighbourhood of dwelling-houses cannot be other than harmful to the health of the inhabitants of the houses.

After some proposed reconstructive work in connection with the sewer at the Swinton Sewage Works has been carried out the main sewers of the district will, so far as capacity is concerned, be ample to deal with the sewage of all the houses proposed in the Council's scheme of housing as well as with the conversion of existing privies.

The nuisance caused by the discharge of a house drain in connection with Broomhall on to the surface of the ground near the public footpath has now been abated by the demolition of Broomhall.

All sewage outfall is at either Pendlebury works or Swinton works. The nature of treatment at each sewage works is: Screening, detritus tanks, chemical precipitation in tanks, filtration through percolating filters (double contact in addition at Swinton) with humus tanks for the final effluent. The effluent in each case has been generally classed as satisfactory by the Mersey and Irwell Joint Committee. That of the Pendlebury works, although the process there is less elaborate than at Swinton, is the better effluent on account of the freedom of the sewage treated there from trade effluent which in the case of the Swinton works has an undoubted harmful effect on bacterial activities in the plant.

Colliery subsidence during the past three years has been responsible not only for sewer fracture but has also caused considerable damage in the precipitation tanks at Pendlebury Works. Here again extensive reconstructive work is contra-indicated so long as subsidence is active. The mere prevention of leakage is all that should or need be attempted in the meantime.

CLOSET ACCOMMODATION.

No conversions were carried out in 1919, in fact the last conversion effected was in the year 1915.

The closet accommodation is set out in the subjoined tabular statement :—

Name of Ward.	No. of Houses.	No. of Water Closets.	No. of Privies.	No. of Ashbins.	No. of Dry Ashpits.	No. of Privy Ashpits.
East	1,013	865	148	783	50	79
Market	1,062	928	134	778	34	117
Newtown	1,230	992	238	930	32	139
Victoria Park ..	1,304	836	468	660	118	234
Old Park	1,157	1,021	136	939	45	84
Moorside	912	672	240	658	22	126
	6,678	5,314	1,364	4,748	301	779

From the statement it will be seen that there remain 1,364 privies to convert. Thus one-fifth of the district housing is at the time of writing unprovided with water-closet accommodation, and suffers the serious disadvantage, the nuisance, and the undoubted risk to health that are inherent in the conservancy system, especially that form of conservancy which above all others is the most offensive and harmful—*i.e.*, the privy-midden system.

Since the reconstitution of the sanitary staff notices have been served on the owners of thirty-five houses to convert privies to water closets. These privies were such as could be dealt with under Sec. 36 of the Public Health Act, 1875—*i.e.*, they were insufficient,—the interpretation of which I assume was meant to be at the time of the framing of the Act, structurally defective. The opinion of most people to-day is that any privy is insufficient, inasmuch as far from safeguarding the public health it is one of the greatest menaces of health and, perhaps, the greatest of all offences in an urban community.

Sec. 36 of the Act of 1875 does not give power to a local authority to contribute towards the cost of conversion, so that the policy of this Council so far has been to patiently await the time when its officials could say, with a due regard to veracity, that a privy was dilapidated, and therefore could be converted without recourse to the public purse.

Sec. 39 of the Public Health Amendment Act, 1907, gives power to a local authority to contribute towards the cost of conversion, half the cost in the case of privy middens being the sum mentioned. By the adoption

of the powers conferred by the above Section local authorities need not wait until privies begin to tumble down, but can proceed immediately with the conversion of all the remaining privies whatever be their structural state.

The reason for the Council's refusal to exercise the powers of Sec. 39 Public Health Amendment Act, 1907, was that certain members thought that it would be unfair to those owners who had already been mulcted in the total cost of conversion if a scheme of contribution were instituted. Such logic has but little consideration for public health or public amenity. There are in the district modern houses fitted with modern sanitation which suffer from the privies as much as do the houses to which the privies are attached. Do not the rights of the tenants and owners of these houses demand that these privies be abolished? Do not the health, the cleanliness, and the public credit of the district demand it?

The matter of cost has, of course, undergone a great change since the days when conversion was active in the district. A privy in 1914, the brick fabric of which could be used for the construction of a water closet, could be converted for a sum of £7. To-day the cost for similar work is £19, and should a water closet have to be erected the cost is at the present time £26. It is, therefore, difficult to see how, without a contributory scheme, the process of conversion is likely to go on. I can conceive of owners closing property rather than undertake to spend £26 plus the sum that may be necessary to cover the cost of material and internal and external repair of the house itself.

I would like to state to the Council that, in my opinion, no more disgusting spectacle and no more nauseating and harmful smell can be imagined from any other process than the emptying of a privy midden. I do not profess to be squeamish, but I say quite frankly that I would do much to avoid the offence to eye and nose occasioned in the emptying of these disgusting accumulations.

The estimated annual cost of the cleansing department is £5,200. This includes wages and horse hire. It is estimated that one-third of the total service of the cleansing department is given to emptying privies, therefore, the estimated annual cost for this work is, roughly, £1,700 per annum. This sum diverted towards the cost of conversions, at an average cost of £24 per conversion, would in about 18 years defray the entire cost of the conversions. Of course each house with a privy would have to be provided with a movable ashbin, and increase of these would therefore occur, but the work of emptying 1,300 movable ashbins is incomparably less than that of emptying 1,300 privies.

WORK OF THE CLEANSING DEPARTMENT.

	No. of Weeks.	No. of Ashpits emptied monthly.	No. of Ashbins emptied monthly.	No. of Privy Pails emptied monthly.	Loads carted to Destructor and Tip and surrounding Farms.		No. of Applications for Ashpits to be emptied.	Loads of Garbage Removed and Burned.
					Dry Ashes.	Privy.		
January	4	201	15,000	320	371	20	—	12
February.....	4	441	16,000	356	512	81	5	12
March	5	637	23,500	445	718	62	3	15
April	4	521	18,800	356	547	73	—	12
May	4	392	18,800	356	468	55	2	12
June.....	5	494	21,800	455	576	40	3	15
July	4	516	18,800	356	498	72	2	12
August.....	4	424	18,800	306	465	64	2	12
September	5	671	23,500	445	606	78	2	15
October	4	371	18,800	356	393	58	—	12
November.....	4	445	18,800	356	463	96	2	12
December	5	657	23,500	445	650	101	3	15
Total	52	5770	236,100	4552	6267	800	24	156

The work of the Cleansing Department consists in the emptying of privy middens, movable ashbins, cesspools, and removal of garbage from shop premises.

The privy contents are taken to surrounding farms and are spread out on the land. The Council's carters take this excremental matter and deposit it on the land, where it is subsequently either spread out as top dressing or spread out to be ploughed into the land. The menace of the former process to the purity of milk supplies in adjacent dairies and cowsheds need not be pointed out. It is self-evident.

The contents of the movable bins were in pre-war days taken entirely to the Council's Destructor. Commencing in 1915 tipping at Pendlebury and at Moorside had to be resorted to on account of shortage of labour. During 1919 no less than 3,719 loads of refuse were tipped at Pendlebury tip to the detriment of all the houses in the area immediately abutting on the tip. In May last year the tip became ignited, and from thence until September burned continually, notwithstanding the efforts of the Fire

Brigade and Council employees. During the time the tip burned the nuisance caused by the smoke was only second in degree to the emptying of the privies—a nuisance which has already been spoken of.

About the beginning of the present year extra men were employed at the Destructor, with the result that at the present time there is some decrease in the amount of tipping, but not until the proposed supplementation of destructor plant is effected can finality in the matter of tipping be looked for.

EMPTYING OF GULLIES.

All gullies in unpaved streets and passages, yard gullies where privies exist, and iron footpath channels, have been emptied by Council employees for about fifteen years. The work was undertaken as a direct result of a visit of inspection made by the late Dr. Theodore Thompson, of the Local Government Board, at a time when the sanitation of the district, particularly with regard to unpaved streets and backyards, and open privy middens called for consideration. Dr. Thompson's recommendations were that paving of streets and yards, and conversion of privies should be undertaken, and indicated that the then sanitary staff, consisting of one inspector, was so overburdened with work that proper supervision of the district's sanitation was impossible. The Council's response to these recommendations was the expediting of street paving, the framing of by-laws regarding yard paving, and the calling upon owners to convert dilapidated privies into water closets. The response to the Inspector's observation about inadequacy of staff was not the appointment of extra sanitary inspectors, but the appointment of men to empty the gulleys above mentioned, it being contended that these men in the course of duty would observe defects and report. Considering that they were men without sanitary training it could scarcely be called fulfilment of the Inspector's desire. The employment by the Council, however, of direct labour to empty gulleys, which now are out of date, is an action which must be considered as conferring considerable benefit on the district's sanitation. These old gulleys are non-self cleansing, and tenants will not cleanse. As the gulleys in the course of improvement work became replaced by modern self-cleansing gulleys, the need to employ a special staff for gully cleansing alone will disappear.

The number of gulleys reported emptied in the year 1919 was 5,670.

COMMON LODGING-HOUSE.

Only one exists in the district, and it appears to be reasonably well conducted.

Seven inspections were made.

No infectious Disease was reported.

The house is not used by vagrants ; the lodgers are mainly permanent.

OFFENSIVE TRADES.

There are two offensive trade premises in the district, but no nuisance has been reported as arising from the conduct thereof. These trades are concerned with gut preparation. They have been unable to obtain the usual amount of guts owing to the continued closure of the local slaughter-houses.

PUBLIC CONVENIENCES.

There are only two in the district, and further accommodation is very desirable.

There has been an urgent demand for a public convenience at the car terminus at Swinton: An effort was made to obtain a site from the Manchester Board of Guardians in the grounds of the Swinton Schools, at the corner of Chorley Road and Partington Lane. This effort was unsuccessful, and an alternative site is being negotiated for in Wardley Street.

PUBLIC BATHS.

The Baths, which include a swimming pond, private baths and vapour bath, have now been in existence for some years. (The pond is open from April to October inclusive.)

Attendances at the Baths last year were as follows:—

Swimming baths Males, 39,691 ; Females, 7,797.

Slipper baths „ 4,087 ; „ 2,859.

The pond water is treated on the Royle's system.

OTHER SANITARY CONDITIONS.

A complaint was lodged by the farmer of Grange Farm, Agecroft, that offensive matter was being brought by the Salford Corporation and tipped on land within this district. Investigation of the nuisance brought to light the fact that Salford Corporation, having acquired land within the boundaries of the district for the purpose of tipping clinker, were at the time of complaint depositing organic matter which became offensive, attracted rats, afforded a breeding ground for flies, and constituted a not inconsiderable nuisance.

At an inquiry held by the Ministry of Health at Salford Town Hall, in August, on the request for a loan by the Salford Corporation to purchase the above-mentioned land, representation was made by this Council to the effect that the Corporation should undertake not to deposit any more offensive material on this land. This undertaking was duly given.

V. Food.

DAIRIES, COWSHEDS AND MILKSHOPS.

No. of Cowkeepers in the district (3 are non-retailers)	17
„ Dairymen „ „	9
„ Milkshops „ „	6

In addition to the above there are 9 Dairymen coming into the district who are non-resident. The total number of milk purveyors in the district, therefore, is 38.

Twenty-three inspections were made of Dairies, Cowsheds and Milkshops in the year 1919.

It will be seen at once that the number of inspections was less than was needful for proper supervision of the milk supply. The deficiency however, was due to lack of staff in the early half of the year. In 1914 it was possible to have triple the number of inspections.

No samples of milk are taken by the Council's staff of inspectors. 75 samples of milk were taken by the County Police, who are responsible for sampling under the Food and Drugs Act. Of the 75 samples taken seven were stated to be below standard, and the vendors were cautioned. I am of opinion that the sampling of milk in this district by the Council's own staff of inspectors is imperatively necessary. At the present time the Council is providing out of public funds a considerable amount of milk in connection with its Maternity and Child Welfare Centre. Being purchaser the Council no doubt desires to be assured of the genuineness of its purchases, and I cannot help thinking that this assurance is unlikely to be provided by the County Police taking samples, and magistrates confining their action to caution when samples prove to be below standard. I presume that being below standard in the case of the seven defective samples of 1919 means that the samples were deficient in fat.

I should very much like to take samples in connection with the cleanliness of milk sold in the district. The conditions under which the distribution of milk is made are little short of scandalous. I am told by persons who have purchased milk of the amount of deposit there is to be

found after the milk has sedimented. Were I not conscious of the conditions under which milk is delivered I would receive these statements with reserve ; as it is, I have no hesitation in accepting them unreservedly.

A report has just been presented to Manchester Corporation by Professor Delepine on the bacterial content of milk, and should render public bodies less oblivious to the deplorable state of the food, which of all foods is that which should be of at least reasonable purity, seeing so many of the coming generation are dependent upon it for their existence.

I believe the only obstacle to the taking of samples by the Council's own staff is objection by the Government Auditor to the expenditure incurred. A ruling on this matter is urgently needed.

Another factor producing uncleanness of milk supply, to which I have previously drawn attention, is the condition under which milking is carried out.

BAKEHOUSES.

Forty-nine inspections of bakehouses were made last year.

Several bakehouses are shops where general groceries are sold and the actual baking is carried out in the living room. This is most undesirable.

The necessary limewashing has been carried out without obstruction.

The number of inspections here again was deficient, but the defect was due entirely to lack of staff.

SLAUGHTER-HOUSES.

No slaughtering took place in the district last year.

Before slaughtering can again take place application will have to be made to the Council for re-licence of private slaughter-houses. There are seventeen of these premises in the district. Not all of these were used to any great extent, in fact only in connection with five of them could it be said that slaughtering was general. This slaughtering took place at any time, so that the chance of the Council's staff of inspectors supervising the soundness of the meat supply was small. The seizures of tuberculous and other defective meat, and the voluntary surrender of the same in the years during which these slaughter-houses were in use is, I think, an earnest of the Council's inability to supervise. I earnestly

recommend to the Authority the framing of fresh by-laws with respect to slaughter-houses if it be the Authority's intention to re-licence these places. I should much like the introduction of a by-law regulating hours of slaughter, or at least compelling slaughter-house occupiers to give the Council officials convenient notice of the hours of slaughtering and numbers of animals killed.

Personally, I should be disinclined to re-licence any slaughter-house which did not conform to some fairly reasonable standard. What should of course be a reasonable standard will be gathered from a visit to any public abattoir. Such a standard is out of the question in this district, but I do not think that the cramped space which characterises these district slaughter-houses in which slaughtering is general is in the best interests of sound meat.

FOOD AND DRUGS ACTS.

Inspector Holt of the County Constabulary has furnished the subjoined figures in connection with sampling of food.

Description of Article.	No. of Samples Purchased.
Milk	75
Coffee	4
Pepper	4
Ginger	4
Baking Powder	3
Yeast.....	2
Oatmeal	2
Cornflour	2
Self-raising flour	3
Epsom Salts	3
Mustard	2
Cocoa	2

All the above samples were stated to be genuine or passable except seven samples of milk. The vendors were cautioned.

UN SOUND AND UNWHOLESOME MEAT CONDEMNED.

Seventeen pounds of bacon were condemned as being unfit for human consumption last year. This represents the total condemnation of last year, although I am assured by my inspectors that it does not represent the total of unsound food. It is, however, known that relaxation of standards with regard to the food supply was a necessary feature of administration owing to food shortage.

VI. Housing of the Working Classes.

In connection with the Government's housing scheme a housing survey was made, and according to requirement submitted to the Housing Commissioner by October 31st last.

In order to give the information asked for in the housing survey it was necessary to estimate a population which was a matter of difficulty, inasmuch as the number of men as yet undemobilised was an unknown quantity, nor could the information be obtained from any source.

The estimation of the population was made from the latest returns made to the local Food Control Office. Returns were made from 6,639* houses, and the total population in these houses, as represented by the number of persons stated by householders to be in residence in their houses was 29,639. To this figure was added 1,000 as representing the number of men still absent, and the figure of 30,600 was arrived at, on which the vital statistics of the district have been based.

The figure is a surprising one. I imagine that most people think the population is greater. The evidence of the figures cannot at present be disputed, and it must certainly be deemed that people desiring to get as much food as possible would not be likely to understate the number of persons resident in their houses.

I.—General Housing Conditions.

Of 6,706 houses in the district all but 289 are working-class houses. Of 6,417 working-class houses two-thirds are four-roomed houses.

No new houses of the working-class type were erected during 1919, and none are in course of erection.

No change of population, such as would be expected from closure or extension of industry, is anticipated.

* The number of houses, according to the rate book, is 6,706. This may be taken as an accurate number. The estimated population will, therefore, be about 300 too little.

The shortage of houses, taking into account unsatisfied demands, replacing by clearance of unhealthy areas and unfit and obstructing houses, is 675. This figure must be regarded as the irreducible minimum. Moreover, it should not be regarded as being definite, for several reasons. A hasty and very imperfect survey only was possible, with a staff which had been absent on war service, so that the number of unfit houses may be subject from time to time to considerable alteration. Again, the 675 makes no allowance for conditions which constitute overcrowding, but which are not officially regarded as such; for example, eight persons living in four-roomed houses which, as already shown, constitute nearly two-thirds of the total housing of the district. As the average cubic content of the bedroom accommodation of four-roomed houses in the district is about 2,350ft. it will be seen that when eight persons inhabit these houses they have each less air space than the minimum allotted by law to persons residing in common lodging-houses. The returns made to the Food Control Office showed that there were 160 families of eight persons residing in four-roomed houses.

The measure contemplated for the relief of the house shortage is, of course, the Council's participation in the National Housing Scheme. Already land has been acquired and plans have been approved for 230 houses. Quantities are now being prepared for the invitation of tenders. The acquiring of further land is being proceeded with. To what extent this further acquisition will go has not as yet been decided, but after allowing for conditions which are outside of the bald estimates of the housing survey, I do not think that 800 to 1,000 houses would be beyond the district's needs.

II.—Overcrowding.

The official overcrowding figure is more than two persons per room. I have already indicated what this means in a four-roomed house. Moreover, in this connection it should be understood that the average height of front bedrooms in four-roomed houses in this district is 8ft. 1in., and of back bedrooms 7ft. 2in.

The housing survey showed that there were more than two persons per room in 208 of the 6,706 houses in the district. This represents a percentage of 3.1 houses overcrowded. In these 208 houses lived 2,065 persons, a percentage of 6.9 of the total population resident at the time of investigation. The latter figure at the time of the 1911 census was 7.9.

The causes of overcrowding are :—

1. Lack of housing accommodation due to the complete cessation of house building. In this connection, however, it should be stated that the greater figure of 7·9 per cent. of population living in a state of overcrowding at the census of 1911 was obtained at a time when house building was by no means stagnant. In 1910 93 houses were built, in 1911 133 houses were built. The number thus exceeded the number needed to accommodate the annual natural increase of population.

2. Desire on the part of some persons to reduce expenditure by pooling resources (*i.e.*, living together). This was especially in evidence during the war.

No measure is available to deal with overcrowding while the supply of houses is deficient. If two families live in one house one cannot be turned into the street, so that at present, and in the interval between the present time and completion of new houses, overcrowding cannot be dealt with other than by house-to-house inspection and the spreading out of persons to such hygienic advantage as the house will afford.

In this connection is to be noted the extraordinary amount of overcrowding there is in cottage houses of the poorer types. In houses of the four-roomed type, which contain two bedrooms, it is not uncommonly found that the entire family sleep in one bedroom, the other bedroom being unoccupied. This disposal of sleeping accommodation is not always entirely due to sanitary defect.

III.—Fitness of Houses.

The general standard of the existing houses in the district can best be judged from the following figures :—

Total houses in district	6,706
Total in areas, etc., unfit for human habitation, and which cannot be made fit	300
Seriously defective but which can be made habitable....	1,650

The two latter figures are approximate, and may even be interchangeable.

The fact that 28 per cent. of the housing in the district is seriously defective—that is, seriously defective according to present-day standards—speaks for itself.

The general character of the defects found—

Structural defects, dilapidations, etc., of walls, floors, and roofs.

Defective lighting and ventilation.

Defective and dirty plaster and decoration.

Defective food storage.

Defective doors and window frames.

Common yards and defective yard paving.

Defective closet accommodation.

The action taken as regards defective houses has been so far as 1919 was concerned under two sections of different Acts—*i.e.*, Sec. 91 Public Health Act, 1875, and Sec. 15 Housing and Town Planning Act, 1909. It will be readily understood that the use of Sec. 17 of the latter Act was not an instrument which could effectively be used at a time when there was not a single unoccupied house in the district. Two classes of property were chosen for exhaustive inspection—*i.e.*, the very worst and such property as could reasonably be dealt with under Sec. 15 of the Act of 1909. With regard to the very worst it may be stated that it was examined with a view to representing it as constituting unhealthy areas, and until such time as the Council's decision with regard to it was forthcoming the service of notices, on the one hand to make it merely habitable pending its clearance, or to bring it up to standard, was deferred. It may be stated in connection with the latter class of property that at the time of writing one area of 87 houses has been represented to the Authority, and it has been decided to deal with it under Part I. of the Housing of the Working Classes Act, 1890. Notices to carry out work which will make the houses habitable merely will now be served.

Difficulties in remedying unfitness were those experienced by all authorities—*i.e.*, shortage of labour and shortage of material. These together constituted the greatest barrier to progress. Preliminary notices served in connection with work necessary were at first productive of little result. Service of Statutory Notices was, as might be expected, productive of some effort on the part of owners.

A difficulty which is presented by the shortage of labour, a shortage which is not entirely represented by the shortage of hands but is also evidenced in shortage of contractors, is that one form of work undertaken delays the execution of another form of work. In connection with housing perhaps one of the greatest necessities is the conversion of middens, necessitating considerable drainage work. At present this work is being held up on account of the only contractor available for this work having undertaken for the Council some drainage work in another connection.

In connection with middens, I would remind the Council that in these days any house provided with a midden is not up to standard, and that not only those middens which are defective in structure, but those which were erected at a time so recent as to make the fabric unquestionably sound, will have to be converted. It must be remembered that it will be possible, is possible in fact, to make representation concerning any house which does not fulfil condition 3 of the standard of house fitness contained in Vol. I. of the Ministry of Health's Manual on Unfit Houses and Unhealthy Areas.

IV.—Unhealthy Areas.

No areas were represented as being unhealthy during 1919, nor were any represented previous to that year. No houses which had already been dealt with under Sec. II. of the Housing of the Working Classes Act, 1890, or Sec. 17 of the Housing and Town Planning Act, 1909, remained to be dealt with. It will be understood that action regarding houses whether individual or in areas, was entirely in abeyance during the years 1916, 1917, and 1918, and that only when the year 1919 had considerably advanced was it possible to commence systematic work in connection with housing inspection.

V.—By-Laws.

No by-laws have been adopted in this district relating to houses, to houses let in lodgings, or to tents, vans, sheds, etc.

VI.—General and Miscellaneous.

Action not included in the foregoing which was taken by the local Sanitary Authority during 1919 in connection with housing was action in connection with drainage under the Public Health Act, 1875 ; action in connection with defective gutters, etc., under the Town's Police Clauses Act, 1847 ; and action as regards new ashbins under Sec. 11 of the Public Health Amendment Act, 1890, and Sec. 36 of the Public Health Act, 1875.

VII.—Appendices. Statistics for the twelve months ended 31st December, 1919.

1. The number of dwelling-houses in respect of which complaints were made that they are unfit for human habitation by householders was 2.

2. As already explained, no action was possible under Sec. 17 of the Housing Act of 1909.

3. Throughout 1919 Sec. 15 of the Housing Act of 1909 was used instead of Sec. 28 of the Housing Act of 1919. The number of orders for repairs issued was 221. The number of houses in which repairs were carried out by the local authority was nil, as was the number of dwelling houses voluntarily closed by the owner.

4. No representation was made to the local authority with a view to making closing orders.

5. No representation was made to the local authority with a view to making demolition orders.

6. No dwelling houses were demolished voluntarily.

7. No action was taken with regard to obstructive buildings.

8. The staff engaged on housing work has been one inspector since June 17th, 1919, and a second inspector since October 30th, 1919.

One inspector now deals with housing under Part I. and Part II. of the Housing Act of 1890. A considerable part of his time has been devoted to the detailed inspection of an insanitary area represented during the first month of the present year, but the inspection of which was completed during 1919. He is now engaged in inspecting another unhealthy area.

The second inspector has inspected property which could be dealt with under Sec. 15 of the Act of 1909 or Sec. 28 of the Act of 1919. His work has included and does include the drawing up of specifications in connection with repairs.

All the clerical work connected with housing and the details for report drafting in connection with representations has been undertaken by these inspectors.

It will be realised that the apparent smallness of the work accomplished is due to the facts of the late commencement and powerlessness to employ as an instrument any Act or Sec. of an Act which involved availability of alternative accommodation.

Subjoined is a complete statement of the inspectorial work done under the Housing Acts.

Number of inspections for Housing Survey	390
Number of primary inspections in proposed insanitary area	174
Number of houses inspected in proposed insanitary area..	87
Number of revisits made to houses in proposed insanitary area	119
Number of primary inspections made under Sec. 15 ..	312
Number of houses inspected under Sec. 15.....	248
Number of revisits made to property under Sec. 15....	623
Number of Preliminary Notices served under Sec. 15....	248
Number of Statutory Notices served under Sec. 15 ..	124
Number of houses where work is in progress under Sec. 15	90
Number of houses where work has been completed under Sec. 15	Nil.
Number of houses included in above which have been transferred to proposed insanitary areas	27
Total number of inspections made	1,618

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1919.

Notifiable Disease.	Number of Cases Notified.							Total Cases Notified in each Ward.						Total Cases Removed to Hospital.	
	At all Ages.	Ages.						Victoria Park.	Old Park.	Moor-side.	Newtown.	Market.	East.		
		Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.								65 and upwards.
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	24	3	14	4	2	8	9	—	4	2	5	3	4	4	4
Scarlet Fever	324	51	244	23	5	—	—	—	36	42	62	99	4	39	122
Typhus Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	3	—	—	—	2	1	—	—	—	1	—	2	—	—	2
Relapsing Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever	1	—	—	—	1	—	—	—	—	—	—	1	—	—	—
Cerebro-spinal Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Encephalitis Lethargica....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Polio-Encephalitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	35	—	—	—	4	27	4	—	3	2	5	8	16	—	—
Dysentery	1	—	—	—	—	1	—	—	1	—	—	—	—	—	—
Ophthalmia Neonatorum	9	9	—	—	—	—	—	—	2	—	2	2	3	—	—
Influenzal Pneumonia	32	4	2	5	10	8	—	3	6	4	6	6	6	—	—
Acute Primary Pneumonia	72	15	28	7	11	7	1	—	12	9	11	16	18	—	—
Measles	762	19	409	326	6	2	—	—	145	210	114	68	163	—	—
Pulmonary Tuberculosis	46	1	3	8	17	5	—	—	8	7	7	9	6	—	—
Non-Pulmonary Tuberculosis	11	1	1	8	—	1	—	—	4	—	4	2	—	—	—
Totals	1342	34	486	634	63	86	34	5	227	279	215	220	259	128	—

Cases of Infectious Disease Notified in Children's Hospital.

	At all Ages.	Under 1.			1 to 5.	5 to 15.	15 to 25.
Enteric Fever	—	—	—	—	—	—	—
Scarlet Fever	5	—	—	—	5	—	—
Diphtheria	—	—	—	—	—	—	—
Acute Poliomyelitis	1	—	—	—	1	—	—
Measles	32	2	—	19	11	—	—
Total	38	2	—	19	17	—	—

DEATHS REGISTERED DURING THE YEAR 1919,

Causes of Death.	Nett Deaths, at the Subjoined Ages, of "Residents," whether occurring within or without the district.								Total Deaths, whether of "Residents" or "Non-Residents," in Institutions in the District.	
	All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
1	2	3	4	5	6	7	8	9	10	11
1. Enteric Fever	1	—	—	—	—	—	1	—	—	—
2. Smallpox	—	—	—	—	—	—	—	—	—	—
3. Measles	4	—	1	3	—	—	—	—	—	4
4. Scarlet Fever	9	1	1	6	2	—	—	—	—	—
5. Whooping Cough	3	—	—	2	—	—	—	—	—	—
6. Diphtheria and Croup	1	—	—	—	1	—	—	—	—	1
7. Influenza	29	—	—	—	4	5	10	8	2	—
8. Erysipelas	—	—	—	—	—	—	—	—	—	—
9. Phthisis (Pulmonary Tuberculosis) ..	22	1	—	2	2	2	8	6	1	5
10. Tuberculous Meningitis	1	—	—	—	1	—	—	—	—	12
11. Other Tuberculous Diseases	9	—	—	1	4	2	3	—	—	14
12. Cancer, malignant disease	26	—	—	—	—	—	2	14	10	1
13. Rheumatic Fever	3	—	—	—	1	—	—	—	—	—
14. Meningitis	1	1	—	—	—	—	—	—	—	3
15. Organic Heart Disease	39	—	—	—	2	3	8	—	14	1
16. Bronchitis	50	2	2	3	—	—	5	12	21	1
17. Pneumonia (all forms)	36	12	1	5	2	—	7	18	4	22
18. Other diseases of the respiratory organs ..	4	—	—	—	1	—	2	5	1	2
19. Diarrhoea and Enteritis	2	2	—	—	—	—	—	—	—	12
20. Appendicitis and Typhilitis	2	—	—	—	1	—	—	1	—	—
21. Cirrhosis of Liver	1	—	—	—	—	—	—	1	—	1
21a. Alcoholism	—	—	—	—	—	—	—	—	—	—
22. Nephritis and Bright's Disease	8	—	1	—	1	—	1	2	3	—
23. Puerperal Fever	—	—	—	—	—	—	—	—	—	—
24. Other accidents and diseases of Pregnancy and Parturition	—	—	—	—	—	—	—	—	—	—
25. Congenital Debility and Malformation, including Premature Birth...	28	28	—	—	—	—	—	—	—	—
26. Violent Deaths, excluding Suicide	8	1	—	—	2	1	2	1	1	30
27. Suicide	3	—	—	—	—	—	—	—	—	—
28. Other Defined Diseases	92	6	2	—	3	3	6	3	39	28
29. Diseases Ill-defined or Unknown	—	—	—	—	—	—	—	—	—	—
Totals	382	54	8	21	27	16	57	103	96	137

INFANTILE MORTALITY.

1919. Nett Deaths from Stated Causes at Various Ages under 1 Year of Age.

Causes of Death.	Under 1 year.										Total Deaths under 1 year.
	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.		
All Causes { Certified Uncertified	1	—	—	—	—	—	—	—	—	—	—
Small-pox	—	—	—	—	—	—	—	—	—	—	—
Chicken-pox	—	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	—	—	—	—	—	—
Diphtheria and Croup	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	—	—	—	—	—	—	—	—	—	—	—
Tuberculous Meningitis	—	—	—	—	—	—	—	—	—	—	—
Abdominal Tuberculosis	—	—	—	—	—	—	—	—	—	—	—
Other Tuberculous Diseases	—	—	—	—	—	—	—	—	—	—	—
Meningitis (not Tuberculous)	1	—	—	—	1	—	—	—	—	—	1
Convulsions	1	—	—	—	1	—	—	—	—	—	1
Laryngitis	—	—	—	—	—	—	—	—	—	—	—
Bronchitis	—	—	—	—	—	—	—	—	—	—	—
Pneumonia (all forms)	—	1	1	—	2	1	7	1	2	12	2
Diarrhoea	—	—	—	—	—	—	—	—	—	—	—
Enteritis	—	—	—	—	—	—	1	—	—	—	1
Gastritis	—	—	—	—	—	—	—	—	—	—	—
Syphilis	—	—	—	—	—	—	—	—	—	—	—
Rickets	—	—	—	—	—	—	—	—	—	—	—
Suffocation, overlying	—	1	—	—	1	—	—	—	—	—	—
Injury at birth	—	—	—	—	—	—	—	—	—	—	—
Atelectasis	1	—	—	—	1	—	—	—	—	—	1
Congenital Malformations	1	1	—	—	2	—	—	1	—	—	3
Premature Birth	13	1	—	2	16	—	—	—	—	—	16
Atrophy, Debility, and Marasmus	3	1	—	1	5	—	3	1	—	—	9
Other Causes	2	—	—	—	2	—	1	1	—	—	4
Totals	22	5	1	3	31	1	12	4	6	54	

FACTORIES AND WORKSHOPS ACT, 1901.

WORKSHOPS, WORKPLACES, AND HOME-WORK, 1919.

1.—*Inspection of Factories, Workshops, and Workplaces.*

Premises.	Number of Inspections.	Written Notices.	Prosecutions.
Factories (including Factory Laundries) ...	7	1	—
Workshops (including Workshop Laundries) .	86	5	—

2.—*Defects Found in Factories, Workshops, and Workplaces.*

(*Nuisances under the Public Health Act*).

Particulars.	Defects Found.	Defects Remedied.	Prosecutions.
Want of Cleanliness and Limewashing	6	5	—
Sanitary Accommodation { insufficient.....	—	—	—
{ unsuitable or	—	—	—
{ defective.....	—	—	—
{ not separate for	—	—	—
{ sexes.....	—	—	—
Roof defective	1	—	—
Insufficient means of escape in case of Fire	—	—	—
Total	7	5	—

1919.

3.—*Home-work.*

Nature of Work.	Outworkers' Lists.					
	Sending twice in the year.			Sending once in the year.		
	Lists.	Outworkers.		Lists.	Outworkers.	
		Con- tractors.	Work- men.		Con- tractors.	Work- men.
Wearing Apparel, making...	1	—	1	—	—	—
Umbrellas, etc.	1	—	1	—	—	—
Total	2	—	2	—	—	—

4.—*Registered Workshops.*

Important Classes of Workshops on the Register at the end of the year 1919.	Number.
Bakehouses	37
Boot, Shoe, and Clog Repairing	21
Dressmaking, Millinery, and Tailors	15
Joiners	1
Metal Workers, Tinsplate Workers, and Whitesmiths	6
Manufacturers of Mineral Waters	1
Laundry	1
Total Number of Workshops on Register	82

5.—*Other Matters.*

Class.	Number.
Action taken in matters referred by H. M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshops Acts, 1901	Notified by H.M. Inspector 1
Underground Bakehouses— Certificates granted during the year	Reports (of action taken) sent to H.M. Inspector on Completion. 1
In use at the end of the year	None
	7

REPORT

ON

The Medical Inspection of
School Children.

Staff of the School Medical Service.

School Medical Officer.

W. STEWART STALKER, M.D. (Glasgow), D.P.H. (Oxford).

Clerk (Part Time).

J. FLOWER.

School Nurses.

Miss METHVEN.

Miss BANKS.

STATISTICAL SUMMARY.

Total Number of Schools—Provided	..	..	..	..	2
„ „ „ Non-provided	..	..	..	..	9
					—
					11
Accommodation—Provided Schools	..	..	..	..	1,508
„ Non-provided Schools	..	..	..	..	3,700
					—
					5,208
Average Attendance for last Completed School Year	..	..			4,016
Per cent. of „ „ „ „	..	..			82.2
Number of Children under five years of age on books	..				519
„ „ „ „ Average attendance	..				295
Number of half-timers	..	..	..	..	140
Assessable value for Education Purposes	..	..			£123,162
Elementary Education Rate	..	2/5, 1919 ;	3/1 in the	£, 1920.	
Yield of 1d. rate (for aid Grant Purposes)	..	..	..		£482
Cost of Medical Inspection to 31st March, 1919	..	..			£776
Grant from Board of Education for Medical Inspection (for year ending 31st March, 1918)	..	..	..	..	£256
Income limit for Meals : 18/- for first two people in family, and 3/- per head onwards.					
No. of Meals supplied year ended 31st March, 1919	..	..			4,300
No. of Children in Deaf, Dumb and Blind Schools	..	..			2

To the Chairman and Members of the Swinton and Pendlebury Elementary Education Committee.

Sir, Mrs. Postlethwaite and Gentlemen,

I have the honour to submit my report as School Medical Officer on the medical inspection of school children for the year 1919.

The year's work has been characterised by no signal development, but it has resumed normal scope in so far as inspection is concerned, and there have been such fresh undertakings as the appointment of an eye specialist to treat defective vision, and the purchase of two munitions huts, one to serve as a combined school clinic and maternity and child welfare centre, the other to serve as an open-air school.

It was hoped at the time of writing last report that substantial progress in the provision of treatment would have been made before another report was due, but now at the time of writing the skeleton of the structure, in which it is hoped to provide dental treatment, refraction, and treatment of minor ailments, forms of treatment all sorely needed, stands in Swinton Park a mockery of progress, and has so stood for months.

It would appear that only some cataclysmic menace such as that of national destruction will awaken the people of this country to activity in making provisions in proportion to the country's needs.

The knowledge acquired in the recent process of preparing human material to prevent our destruction was to the effect that a large proportion of it was useless for protective purposes by reason of preventable physical infirmity.

Had some sane scheme of medical inspection and treatment for child and employed adults been in operation the menace would have been less cataclysmic.

Are we to proceed as before in easy indifference to the physical deficiencies of our race, and then enlist in our service for the purpose of industry and national defence persons enfeebled by avoidable disease

and embittered by neglect, or are we to be hustlers in our efforts to insure fitness by preventing unfitness, and is the national answer to the question typified in the story of the development of the Council's treatment scheme since the purchase of the munition huts?

I would like to draw the attention of the Authority to its obligations in connection with the Education Act, 1918, in so far as the medical supervision of children in continuation schools is concerned. Although the institution of education in such schools is not at present possible in this district, for an obvious reason, some arrangement is both possible and practicable with district industrial firms, especially those which have already established welfare centres, for the medical supervision of their workers between the ages of 14 and 16. It might even be possible to provide educational facilities in these institutions. In another part of the report I direct your attention to the urgency which exists for medical inspection of juveniles who for a period have been under the strain of industrial employment.

I have to record my appreciation of the service of Nurses Methven and Banks. They have accomplished much good work.

Mr. Flower, Clerk, has had his time so fully occupied elsewhere that considerable clerical duties have fallen to the nurses.

I have the honour to be,

Mr. Chairman, Mrs. Postlethwaite, and Gentlemen,

Your obedient servant,

W. STEWART STALKER.

WORK ACCOMPLISHED.

Routine Inspections	1,728
Special Cases seen at School	36
Clinic :—	
No. of Children seen	1,147
No. of conditions inspected	1,405
No. of Individual Inspections	3,111
No. of Treatments	9,941
Average No. of Treatments per child treated	8.66
No. of Nurses' Visits to departments	249
No. of Nurses' Visits to homes	604
No. of Examinations for Cleanliness.....	8,318
No. of Statutory Notices to Cleanse served	12
No. of Children Cleansed	9

It should be explained that the figures in the tables at the end of the report do not embrace the whole of the work of medical inspection.

The total there is the total only of those referred for treatment and observation from routine and special examinations. Figures in connection with convalescent cases of infectious disease, contacts of infectious cases, cases referred by rota committees, attendance officers, teachers and parents with reference to attendance and various other cases, are not included in the tables unless these cases were referred for treatment or observation. Thus, cases which were presented for examination on account of continued school absence, and which after examination were found to present no abnormality, as was frequently the case, were referred neither for treatment nor observation, and were therefore outside the scope of the tables.

This statement is necessary to explain the disparity between the above figures and those in the body of the report, and figures in the Board of Education tables at the end of the report.

Last year was the first year since 1914 in which the school medical service attempted to resume normal activities.

Routine inspection of entrants, leavers, and an intermediate group of children of the age of 8 years was carried out. It thus came about that the number of routine inspections figures in the tabulated statement of work as a much larger figure than that of 1918.

On the other hand, the number of individual inspections and treatments at the clinic was less than in 1918. This can be attributed to the following facts—*i.e.*, that the condition of ophthalmia, which had for years been epidemic amongst school children, was for the year 1919 under control; that certain other minor ailments, *e.g.*, impetigo, were of lessened incidence, and that it became impossible to deal in similar fashion with measles and whooping cough convalescents and contacts, as had been done in the preceding year, *i.e.*, by inspection at the clinic, their return to school being governed by the special clauses concerning these affections in the regulations regarding infectious diseases.

Happily the work of the school medical service was uninterrupted by change of staff in the year 1919.

Epidemic disease, unfortunately, was very prevalent throughout the year, and apart from the interruptions caused in the school attendance of individuals (affected and contacts) the following school closures are to be recorded :—

For Influenza—All schools from February 25th to March 17th.

For Measles—St. Stephen's Infant School, from April 28th to May 5th.

In a year when influenza, measles, and scarlet fever were epidemic it was to be expected that school attendance would suffer. On the other hand, there is the compensating influence of the lessened incidence of ophthalmia, which was a factor of considerable adverse influence on attendance in the years preceding 1919.

Viewing the problem of the ailing school child as a whole, I am satisfied that in so far as minor ailments are concerned the school children of the district are at an immeasurable advantage when comparing the possibility of treatment and early cure at the present time than they were at a time when the Authority was as yet without its own treatment centre. Moreover, the sense of consciousness on the part of the poorer parents would appear to have received considerable stimulation by the knowledge that effective and costless treatment is available without the effort, often impossible, of taking children to hospital. And this consciousness would appear to be in increasing evidence regarding the grosser infections. I find that it is much less difficult to persuade mothers to take their children to hospital for affections which are to them demonstrable mainly by indirect evidence. I refer to such affections as pulmonary tuberculosis, directly evidenced to them only by anæmia, to heart trouble, often unsuspected until revealed in the course of examination for some cause

other than heart affection. In this connection the thanks of the Education Committee are due to the staff of Gartside Street out-patient branch of the Manchester Children's Hospital, and especially to Dr. Lapage. Dr. Lapage has given valued opinions on many cases, and has admitted not a few into hospital. This co-ordination is one of the happiest in results I have to record.

There is one form of affection for which treatment is difficult to obtain on account of failure and refusal of the parent to seek the necessary remedial measures. That affection is bow legs and other deformity of legs usually the result of rickets. It is surprising the belief that parents possess that the legs will come straight and that some surprising results "happen" in the complete absence of treatment is not denied. I believe in the majority of cases parents dread operations. Some are willing to have osteotomy performed, but they are few. Where refusal is emphatic in a few cases massage has been carried out in the clinic.

The Education Committee's scheme for extending the scope of treatment has not had a speedy development. In the spring of last year two munitions huts were purchased with a view to converting one into a combined school clinic and maternity and child welfare centre, and the other into an open-air school. At the time of purchase the Committee had not decided where to erect the huts. Several sites were proposed. Some were unsuitable, one at least was unobtainable. Eventually it was decided to negotiate for some land in Swinton Park, adjoining the Cripple School of the Manchester Education Committee. The negotiation took time and when completed the question of drainage took more time, as permission had to be obtained from the Manchester Education Committee for connection with their drainage system. When the question of expenditure was entered into it was found that a considerable sum was involved, and that a loan would be necessary if the scheme was to be carried out. The Council approved of the scheme submitted by the School Medical Officer and Surveyor, subject to any amendments proposed by the Board of Education and Ministry of Health. At the present time the position is that the plans have been submitted to the Board and Ministry, and approval of the scheme is awaited. (This approval has been obtained.)

In the meantime the scheme of work has had a development in the appointment of Dr. William Stirling (jun.) as ophthalmologist. Dr. Stirling will undertake the examination of all cases of defective vision, and the re-examination of all cases for whom spectacles are prescribed at stated intervals. An arrangement has been entered into with a firm of oculists in Manchester for the supply of spectacles at contract rates. This firm will send a representative on eye clinic days to measure for

spectacles, and an arrangement will be entered into whereby each child prescribed for will be supplied with spectacles and supervised in the use of them.

This clinic will be conducted in the present clinic premises until transference to the new premises can be effected.

The most urgent need of the school medical service unfortunately cannot be met until the new premises are ready—*i.e.*, a dental service. The Committee's scheme of work includes the appointment of a dentist.

The operative treatment of enlarged tonsils and adenoids is the intention of the Committee. Negotiations with Manchester Children's Hospital and Salford Royal Hospital are being conducted for the treatment of cases of these affections. Should these negotiations materialise in an arrangement (failing an arrangement it is the Committee's intention to carry out this work in their own clinic), with the new clinic in use, the Committee's scheme of treatment will have come into complete operation, and benefit out of all proportion to cost will undoubtedly result.

The new open-air school initially will make provision for sixty ailing children. The number of ailing children in the district who would derive benefit from open-air school education is considerably greater than the number it is proposed to accommodate. At the commencement of any new undertaking, however, it would be a mistake to overburden those responsible for the conduct and supervision, and I am advised that no more than sixty children should be dealt with at the commencement of the school's activities.

The open-air school conducted in the pavilion of Swinton Cricket Club is still in existence, and has, in spite of great difficulties, successfully accommodated throughout the year thirty ailing children. All of these children (with one exception) had at some period of their lives exhibited signs of active tuberculosis, which later had become quiescent. Recent examination of these children by the County Tuberculosis Officer revealed the fact that at the time of examination four of them had signs of active tuberculosis. These were accordingly excluded from the school. Examination of all by the School Medical Officer revealed the fact that many of them had benefited by their association with the school to such an extent that their return to ordinary school to make room for children less fortunately situated physically was advisable.

It is not intended that any child with signs of active tuberculosis shall be accommodated in the new open-air school. The school will be

used as a preventive measure against the affection, but not as an instrument of treatment of the affected.

It is much to be regretted that Miss Brobson, mistress of the present open-air school in the Cricket Pavilion, has not had placed sooner at her disposal the new premises. That she has carried on at all is a tribute to her tenacity, for nothing more primitive or less likely to encourage could be imagined than her present accommodation. I think what she has done under existing conditions provides assurance that under the new conditions much benefit, educational and physical, will be the portion of her charges.

ROUTINE INSPECTIONS.

It is not my intention to enter minutely into the findings of routine inspection. They do not differ, except in detail, from those which have been discussed at length in former reports. Alteration in the Board of Education tables recording these findings has for the time being somewhat dislocated the machinery for record keeping, but in future years medical inspection will have adapted itself to the new conditions.

VERMINOUS CONDITIONS.

The table now presented is, unfortunately, not an exact representation of the conditions found at the nurses' inspections. These findings are recorded in three different classes—*i.e.*, those found to be clean, those found with nits in the hair, and those found with live vermin in the hair. In order that an exact record may be furnished any child found with even a few nits, and the number is admittedly large in the district, should figure in the nits column. The nurses in their work, however, regarded benevolently the children with few nits, and such children in the table figure in the column of clean children. Those who figure in the nits column are children who had such a number of nits in the hair as to call for action—*i.e.*, warning of parents. Even that number, I am convinced, is too small. I believe that parents of all children with nits, however few, should be warned of the danger that lies in leaving nits in the hair without treatment. Again, I do not think the number of children found with live vermin is a high enough figure. This, however, remains to be proved by subsequent inspections, which will be undertaken with due regard to exact findings.

All boys and girls were examined twice in the year, so that some 8,000 examinations were made for conditions of cleanliness. The table is a record of the findings made in the second examination of 1919.

TABLES OF VERMINOUS CONDITIONS.

	Total Examined 1919.	Clean.	Per Cent.				Nits.	Per Cent.				Live Vermin.	Per Cent.			
			1919.	1918.	1917.	1914.		1919.	1918.	1917.	1914.		1919.	1918.	1917.	1914.
1... {Boys ... Girls ... Infants ...	229 239 160	229 229 155	100.0 95.8 96.8	100.0 93.8 95.4	99.5 88.0 96.2	95.7 69.9 89.3	— 10 4	— 4.1 2.5	— 3.8 4.2	0.2 10.8 3.5	2.5 26.0 8.1	— — 1	— 2.8 0.5	— — 0.6	0.2 1.1 0.3	0.8 4.0 2.0
2... {Boys ... Girls ... Infants ...	68 81 55	68 73 52	100.0 90.1 94.5	100.0 90.1 97.0	99.4 84.1 80.0	89.4 54.9 77.7	— 8 1	— 9.8 1.8	— 9.8 3.2	0.6 12.4 17.9	5.2 36.2 19.7	— — 2	— — 3.6	— — —	— 3.3 1.6	— 7.6 —
3... {Boys ... Girls ... Infants ...	335 328 185	335 282 177	100.0 85.9 95.6	98.2 95.0 97.0	100.0 91.2 93.3	96.6 80.9 89.8	— 44 5	— 13.4 2.7	— 4.4 1.6	— 6.3 4.2	2.5 19.0 7.4	— 2 3	— 0.6 1.6	0.7 0.7 1.2	— 2.3 2.4	0.7 1.8 2.7
4... {Boys ... Girls ... Infants ...	177 183 103	177 180 101	100.0 98.3 98.0	100.0 90.1 93.0	99.4 92.6 95.1	95.8 68.8 84.0	— 3 2	— 1.6 1.9	— 8.1 1.9	0.2 6.8 4.0	3.1 28.8 13.4	— — —	— 1.2 5.2	— — —	0.2 0.5 0.8	0.5 2.3 2.5
5... {Boys ... Girls ... Infants ...	30 25 25	30 18 22	100.0 72.0 88.0	100.0 79.0 94.2	98.8 76.8 92.6	88.2 57.1 86.4	— 7 3	— 28.0 12.0	— 21.4 —	— 21.8 4.9	8.8 39.2 10.8	— — —	— — —	— — 5.4	1.2 1.4 2.4	— 3.5 2.7
6... {Boys ... Girls ... Infants ...	160 174 135	160 166 133	100.0 95.4 98.5	100.0 97.7 97.0	97.0 85.8 94.4	92.6 76.5 86.8	— 7 2	— 4.0 1.4	— 2.1 1.3	0.6 10.8 3.5	2.6 21.2 8.2	— 1 —	— 0.5 —	— — 1.3	2.3 3.3 2.1	2.0 2.2 4.8
7... {Boys ... Girls ... Infants ...	226 223 164	226 211 164	100.0 94.6 100.0	99.6 94.5 97.6	100.0 83.4 94.5	94.1 70.7 91.5	— 10 —	— 4.4 —	— 4.0 2.3	— 15.7 3.9	48.8 24.6 6.3	— 2 —	— 0.9 —	0.3 1.2 —	— 0.9 1.5	— 4.5 1.5
8... {Boys ... Girls ... Infants ...	55 43 47	55 38 46	100.0 88.3 97.8	98.2 83.2 97.3	99.0 90.3 98.9	98.2 77.6 87.7	— 5 1	— 11.6 2.1	1.7 16.6 2.6	— 7.0 6.4	1.7 20.8 8.7	— — —	— — —	— — —	0.9 — 1.1	— 1.4 3.5
9... {Boys ... Girls ... Infants ...	92 95 123	90 89 120	97.8 93.6 97.5	100.0 95.0 99.8	99.4 90.3 96.9	95.1 81.5 90.8	2 6 3	2.1 6.3 2.4	— 3.4 1.1	0.6 9.1 3.1	2.4 15.2 4.5	— — —	— — —	— 1.3 —	— 0.5 —	2.4 3.2 4.5
10... Infants ...	72	71	98.6	100.0	97.1	95.6	1	1.3	—	1.1	4.3	—	—	—	1.7	—
11... Infants ...	262	250	95.4	96.4	92.7	84.0	8	3.0	3.1	5.2	13.9	4	1.5	0.4	2.0	1.1
Totals	4094	3947	96.4	96.4	93.9	85.2	132	3.2	2.8	4.9	12.1	15	0.4	0.8	1.2	2.1

The parents of children found to have live vermin or abundant nits were notified concerning the condition. After a certain lapse of time the nurses returned to the schools to inspect those children about whom notices had been sent. If they were found unclean at the second examination stronger notices were issued to parents, and a third examination was undertaken at a later date. If the finding of this examination was unsatisfactory Statutory Notices, in pursuant of Sec. 122 of the Children's Act, were served. No compulsory cleansing was necessary, as children, after service of Statutory Notices on parents, were readily surrendered for treatment.

A great deal of uncleanness is associated with general decadence of home life, not a little contributed to by the hopelessness of endeavouring to obtain, or even aim at, a decent standard of life in houses which are, in official language, unfit for human habitation. As a general rule, the dirtiest children come from the worst houses. I admit at once that the undesirable and neglectful parents often inhabit the unfit houses, but I cannot admit that such a contention offers any solution of the problem of child degradation, which, for the moment, is being considered.

I believe that the solution of the verminous problem, and I do not think any sensible person believes otherwise, depends upon the proper conception of the problem of the submerged classes as a whole. A higher standard of life is essential to the eradication of evils other than verminous infestation, and the obtaining of that higher standard will depend largely upon the sympathy with which those in authority and those under authority carry out their respective obligations.

Meanwhile, treatment of verminous persons will continue to be palliative.

SCABIES.

At routine inspection five children of the total examined were found to be suffering from scabies.

Forty-nine other children were under observation and treatment at the clinic.

In the course of the year the fifty-four cases of scabies occasioned considerable effort on the part of the staff. Each case was kept under regular observation, and was treated where necessary by baths, and in all cases by inunction.

215 inspections of scabies cases were made by the School Medical Officer. Some of the most persistent cases were seen weekly over an extended period.

The fifty-four cases received 724 treatments. These treatments represent ointment treatment only. In addition, ninety-three baths were given at the Council's Cleansing Station.

The disinfection of the personal and bed clothing of each case was attempted and in most cases was carried out. Where, however, a child was in possession of only one outfit the disinfection of personal clothing could not be carried out.

In scabies, as in verminous conditions, much depends upon the home. The cleanest child from the best home will become infected with scabies, just as the cleanest child will become vermin infested. But here the similarity ends, for the clean child will be treated at once in either case, part of the treatment being the divesting of infected garments. The child from the slum home is often untreated, or if an attempt is made at treatment it is useless, as everything with which the child is associated, bodily clothing, bed clothing, household effects, etc., is probably in a position to reinfect. If the local authority steps in and helps, the effort is no more than dilution, and not even that where garments, body and bed, are not in duplicate.

It thus comes about that cases come to the clinic week after week which show a chronicity which really is due to reinfection. Were these cases taken into hospital they would in most cases be well in a few days. As it is, no more can be done than to help the affection wear itself out. Meantime these poor children must suffer agony from irritation and sleeplessness.

The amount of school attendance lost to each child suffering from chronic scabies is serious. One boy was excluded on August 26th, 1919, and is still excluded despite the fact that he has had continuous treatment (8 baths and fifty-two other treatments). Several other children, including a sister of the above boy, have been out of school for a period which, although not of the duration above indicated, are yet sufficiently long to seriously interfere with education. Several times some of these children have been readmitted to school apparently well, to be excluded shortly thereafter with fresh manifestations of the affection. All of the chronic cases come from defective homes where inattention to cleanliness and deficiency in supply are prevailing conditions.

EXTERNAL EYE DISEASE.

Twenty-three cases of external eye disease were referred for treatment from routine inspection, three were referred for observation. Of these twenty-six were conjunctivitis. Besides these 104 cases of external eye inflammation were seen at the clinic, all of which were referred for treatment, which was given at the clinic.

The occurrence of a considerable outbreak of ophthalmia in the year 1916 was, it will be remembered, the immediate cause of the Authority adopting the policy of providing its own treatment. Ophthalmia, like pediculosis and scabies, is a communicable affection. It is associated with uncleanness, and the clean suffer because of the dirty. Its prevalence is contributed to greatly by insanitary conditions connected with schools. Given an outbreak nothing would appear to be more effective in its furtherance than the common school towel.

Ophthalmia during 1919 was much less prevalent than during former years. If reference be made to the figures in the tables it will be found that last year they compare most favourably with the figures of former years.

In the year 1918 204 children were under treatment for inflamed eyes. In the year 1917 423 children were under treatment for inflamed eyes. Therefore in two years this affection has been reduced by three-quarters of its prevalence. It is not without reason that credit is given to the untiring treatment that has been afforded each individual suffering. In the absence of treatment there is assurance that the affection would still be productive of much suffering and diminished school attendance, for where neglect in clinic attendance was practised, very soon cases got into such conditions of infectivity and infirmity as to render exclusion necessary, both for the sake of others and for their own sakes.

EAR DISEASE.

Fourteen cases were referred for treatment from routine inspection.

Eighty-five case of otorrhœa came under observation during the year. Why the condition should be more prevalent in boys than in girls cannot be stated, but such was the finding of 1919. Many of these cases were very old-standing cases, to whom the treatment afforded at the clinic was palliative only. As stated in former reports, however, this palliative treatment made school attendance possible. These cases were unobjectionable as long as they were under daily treatment. Were treatment, from one cause or other, denied them they quickly became the victims of the most offensive form of ear discharge.

Many children who attended the clinic for otorrhœa were suffering from adenoids. Here again the treatment afforded was palliative. The surgical treatment of adenoids in this district has always been unsatisfactory. Many cases cannot afford private treatment, others object to treatment, hospitals are far removed and have long waiting lists. Year after year the same story has to be told of repeated attempts to persuade parents of the necessity of having operations performed for the removal of enlarged tonsils and adenoids. Year after year the same proportion of unfulfilled promises is to be recorded. The time has therefore come for the Education Committee to provide the treatment. At the moment of writing the Committee is in communication with the Manchester Children's Hospital regarding an arrangement that might be entered into with them for this work. Were it undertaken at the Hospital at Pendlebury the arrangement would be admirable. If, however, arrangement is made for the work to be conducted at Gartside Street, then I have misgivings as to the effectiveness of the arrangement.

TUBERCULOSIS.

At routine inspection three leavers, one boy and two girls, examined were suffering from pulmonary tuberculosis.

In the intermediate group and in the infants in no child was pulmonary tuberculosis detected.

Tuberculosis of glands was discovered in two leaving boys and one leaving girl, and in two boys and one girl in the intermediate group.

Bony tuberculosis was detected in one leaving boy.

One boy in the intermediate group had abdominal tuberculosis.

The extent of tuberculosis in connection with routine inspections is embraced in the above statement.

At present there are records in the School Medical Officer's department of many children who have at one time or other been notified as suffering from tuberculosis. In many of these children no doubt the disease is quiescent. The vast majority have been to the Tuberculosis Dispensary, and not a few have been resident in sanatoria for a short period.

Recently a scheme of co-operation between the School Medical Officer and the County Area Tuberculosis Officer has been put into operation whereby regular information will be forthcoming concerning affected children.

With such an accumulation of names of children under suspicion of tuberculosis it became necessary recently, in order to organise the education of these children, to have recent and definite information regarding their condition.

Accordingly all these children are being sent in bi-weekly batches of eight to ten to the Tuberculosis Officer, who returns to my department a report on the condition of each child and a statement concerning school attendance.

Already most of these children have attended the Dispensary, and of this number 28 show signs of active disease. In the remainder the disease is apparently quiescent and they are fit to attend school.

The question arises whether these post-tubercular children should be treated as pre-tubercular children are. I am emphatically of opinion that they should—*i.e.*, that the ordinary elementary school is contra indicated. This opinion is emphasised in reflecting upon the sanitary condition of the public elementary schools of the district, to which reference is made hereafter.

Active cases are excluded from school both for their own sakes and the sake of others. To what extent the exclusion of active cases from an open-air school is justifiable is a matter of opinion.

With such a large accumulation of children with tubercular taint on the registers of the public elementary schools of the district it seems most desirable to propose that open-air education in the play grounds of these schools be resorted to as largely as possible. The open-air school will afford accommodation for but a small proportion of the quiescent cases, probably only for that proportion which is represented by those who have recently returned to unhealthy homes from sanatoria.

The extraordinary fluctuations in physical condition of these tubercular children render the supervision of their education a matter of difficulty. A child who to-day is without sign of disease may in a month be excluded, and a month later may again be free from signs. I think myself the only reliable way of dealing with them is to allow the County Tuberculosis Officer to say whether or not they shall attend school, and to issue instructions accordingly.

There were five deaths of persons belonging to the district from pulmonary tuberculosis under the age of 15 last year. Only two of these were between 5 and 15, so that the form of pulmonary tuberculosis found in children of school age would not appear to be immediately fatal. To follow up these children into adolescence and maturity is a most important undertaking, and that it is even now possible is demonstrated in the fact that the Tuberculosis Officer can take over cases from the School Medical Officer, and the Factory Surgeon can co-ordinate with both. In connection with the work of the latter, I have been enabled as Certifying Surgeon to prevent the employment of tubercular children in the altogether undesirable atmosphere for tubercular subjects of a textile mill, not from knowledge derived at the mill, but from knowledge gained as School Medical Officer. It is to be hoped the time will soon be when every child employed not only industrially, but in warehouse and office, will be certified as fit for the specific employment chosen. I understand the very scheme I proposed in a paper read at the Royal Sanitary Institute Conference at Blackpool, in 1914, is in operation in America. As matters stand tubercular children I reject in factories can obtain employment in picture palaces and other places without hindrance.

FOLLOWING UP.

The same machinery was used as in former years with regard to defects found at routine inspection—*i.e.*, parents were notified when defects were of sufficient gravity to necessitate treatment.

After a certain period the school nurses called at homes to ascertain what was done, and if nothing in the way of treatment had been obtained the nurses endeavoured to persuade parents to obtain skilled advice concerning the defects.

I have hitherto expressed the opinion that this is the most unproductive work of the school medical service in the district. Most of the nurses' efforts are wasted, and I feel that they would be much better employed in other directions. Many visits are paid to houses with closed doors. Many promises are made which are not fulfilled. That visits are necessary for certain purposes I do not deny, but the routine practice of following up visits of nurses in connection with defects notified at school medical inspection is largely a wasted effort. The nurse can of course be used to make it almost obligatory for the obstructive parent to bring the child to the clinic. That is useful work, and when the Committee has its own fully equipped treatment centre it will no doubt be largely practised. On the other hand, that part of the nurse's time which is

devoted to paying calls on mothers who are occupied all day in arduous house duties, to ask them to take their children to Manchester Eye Hospital because the child does not see well is spent uselessly.

I find, however, that what can be done is the inviting of the parent to the clinic and there demonstrating defects. It is wonderful how little a parent is concerned over a defect she cannot see, even although told of its existence.

All re-inspections were made at the clinic, and of that treatment obtained which could not be undertaken at the clinic a considerable part was as the result of demonstration of defect, and persuasion. Even the threat of non-certification in factories had to be used, followed up in one or two cases by refusal to certify until remedy was obtained.

Teachers and School Attendance Officers have co-operated freely in the process of following up.

All convalescent scarlet fever cases and contacts, and all convalescent diphtheria cases and contacts were seen at the clinic before return to school. All diphtheria cases were swabbed before return to school, and all contacts were treated in similar fashion.

An important part of the work has been the following up of defects which have been attributable to environment. The sanitary staff have frequently been called into the scheme of following up to deal with homes which were provocative of conditions met with in the course of medical inspection. Such conditions were verminous infestation, scabies, impetigo, bronchitis, malnutrition, anæmia, the three latter conditions being largely associated with dirty and neglected homes. It is of little avail to provide school meals for malnourished, anaemic and bronchitic children if they come from homes where the windows don't open, and where the rooms are indescribably filthy and the bedding consists of a flock mattress saturated with urine and a few soiled rags in place of blankets. A considerable amount of house cleansing has been effected as the result of medical inspection of school children, and the more or less accidental revelation of unknown sanitary defects of the grossest kind is further proof of the need there is of systematic house to house inspection.

I would like those members who accompanied me in the inspection of an area I recently represented to the Council as unhealthy, to express an opinion as to whether the following up by a school nurse of a physical defect, say of malnutrition, anæmia, bronchitis, would be likely to be productive of benefit so long as the victim were living under such housing conditions as exist in that area.

SANITATION OF SCHOOLS.

I have spoken in the last paragraph of sanitary environmental defect in the child's home life. Unfortunately there is another sanitary environmental defect which is operative in this district, and that is in the child's school life.

It is needless for me to refer specifically to schools which demonstrate defects of school hygiene. The defects are well known to the Committee, and also to the School Managers, and it may be said at once that improvement in the district schools would have been effected ere now, so far as the voluntary schools are concerned, if the financial responsibility incurred in the improvement could have been met.

It is, however, essential that I should state certain facts which militate against successful education and against the health of children already prejudiced by unhappy home conditions.

A pre-tubercular, post-tubercular, or early tubercular child compelled to sit in notoriously defective ventilated rooms calls for comment. The process of prevention is dissipated in an effort to fit the child for employment by squeezing a healthy mind into an unhealthy body in an unhealthy atmosphere. Could anything be more paradoxical?

Now at a time of financial stress, such as the present, I do not come forward as an advocate of vast expenditure on new school buildings. On the contrary, I say most decidedly retrenchment in new school buildings is urgently needed, not so much from the financial point of view—finance is not my *métier*—as in the interests of the child's health. Nature, after all, is the child's chief school, and it is undesirable to supplement nature's teaching under conditions as dissimilar as can well be fashioned.

Hitherto it has been the custom to build elaborate buildings, with equipment of the most costly nature, and even with less elaboration of environment it has become necessary often in order to maintain health to go into the school-yard and teach the children in all simplicity, under the canopy of heaven.

Now why cannot this process be carried out in this district, not as a variation at remote intervals of the ordinary class-room practice, but in substitution of it, so long as the weather will permit, and if the weather do not permit, some simple shelter, such as canvas, or an army hut without sides, would ensure that for the major portion of the year the children would be breathing air sufficiently pure as to be without prejudice to their health, instead of an atmosphere contaminated to such an extent as to be really dangerous.

Apply the principle of the open-air school to the ordinary school by conducting as much instruction as possible in the playground. There is no expense connected therewith except, perhaps, that incurred in some improvement of the surface of the yards. I do not know how much in harmony or discord open-air instruction may be with preconceived ideas, but this I say emphatically, that at present I am prevented from administering the benefits of medical inspection to the extent of their legitimate aim by the condition of schoolrooms.

One other defective feature in the schools I would like to draw attention to is defective cloak-room and lavatory accommodation. It is useless to attempt the prevention of pediculosis when cloak-room accommodation allows of dirty garments touching clean garments. I know all sorts of expedients are resorted to by teachers to cope with this defect of cloak-room. Here again expense need not be incurred. Why should the children cover their heads? It is a mere fashion, not only unnecessary but harmful. By dispensing with the use of hats cloak-room accommodation would then be more ample and prove more suitable for such cloaks as are necessary. Lavatory accommodation is defective by reason of the condition of towels. A dirty towel is worse than no towel. The ideal proceeding would be to provide each child with a clean towel; failing that a more plentiful supply of roller towels should be in use. With the dirty towel are associated impetigo and conjunctivitis.

EMPLOYMENT OF SCHOOL CHILDREN AND YOUNG PERSONS.

It is requested by the Board of Education that reference be made in the annual reports of School Medical Officers to employment of school children.

No by-laws governing this employment are in force in the district, and there is no supervision. It is therefore impossible to give any account of employment of children out of school hours.

The granting of Half-time Exemption Certificates ceased on February 1st, of 1919. During last year, therefore, in this district comparatively few children entered into half-time employment. On the other hand, the County Education Authority were granting half-time exemption certificates throughout the year, so that in the neighbouring district of Worsley children are still entering the mills as half-timers.

Of 180 children presented as half-timers in Swinton and Pendlebury and Worsley for certificates for fitness for employment under the Factories and Workshops Act, 173 were granted certificates of fitness. The seven rejections were for the following reasons :—

Uncleanliness of head	4
Debility	1
Otorrhœa	1
Loss of one eye	1

In the same districts 460 children between the ages of 14 and 16 were presented for certification, of whom 452 were granted certificates. Eight rejections were for the following reasons :—

Uncleanliness of head	6
Anæmia	1
Debility	1

356 persons between the age of 14 and 16 were presented for certification, of these nine were rejected for the following reasons :—

Uncleanliness of head	4
Debility	3
Tubercular adenitis	1
Congenital hip dislocation	1

All rejections with the exception of rejections for verminous conditions, which were promised and granted certificates on remedy of the affection, were notified to the Authorities of Juvenile Employment, Ministry of Labour. These cases were dealt with by the Juvenile Employment Advisory Committee, but their difficulty in finding suitable employment for the rejected was great inasmuch as the district presents a limited field in so far as variety is concerned, for juvenile employment. Cotton mills and coal mines are not dissimilar in their disadvantageous conditions of employment for physically defective persons, and conditions outside the immediate disadvantage to children's physical condition often lead to the granting of a certificate. Often after rejection of a child I

have been visited by parents who furnished evidence of great hardship caused by rejection, and a most difficult and responsible position is created for the Factory Surgeon who, knowing the straitened circumstances of homes, yet knows that the certification of children from these homes would be harmful to the children's health.

I find it impossible to adopt an undeviating rule, and am often guided by my knowledge of the social conditions surrounding cases. The broad mind is probably the best safeguard against vexatious administration, but as I have already indicated the problem is not easy.

The temptation for parents to seek for their children higher paid employment of a more exacting nature, when less remunerative employment of a healthier nature is available, is great, and the former type of employment is not unrepresented in the district.

As I have pointed out in former reports, the advantage of holding the dual appointment of School Medical Officer and Certifying Factory Surgeon in any district is considerable. In Swinton and Pendlebury I already know the physical condition pertaining to children presented to me for certification under the Factories and Workshops Act. Many of these conditions would be unknown to me were I not School Medical Officer. This dovetailing of work is most effective, only its scope is limited to such employment as is embraced by the Factories Act. When the medical examination of children attending continuation schools is in force the scope of examination of persons entering employment will be much widened. The rejected child at present can find employment outside the scope of the Factories Act, and no supervision of him is provided for. By means of the provisions of the recent Education Act he will be supervised and treated, and it appears to me that the function of the Certifying Factory Surgeon should now be merged in that of the School Medical Officer. Much needed examination after employment has had time to exert its influence will be secured by means of the extension of medical inspection to persons up to 18 years of age. Rejection from employment of persons suffering as a result of employment, or suffering from affections communicable to others, should then be made possible.

I am convinced, after close application to the subject, that necessary as is examination before employment, it is much more so after a period of employment.

In the welfare schemes of the big industrial concerns of the district no medical inspection of employees figures. This is an omission which must be apparent to anyone who has had any lengthy experience of

welfare work. I am informed that any action in the way of providing medical inspection must come from the factory occupiers. I think it unlikely to come until some representation on the subject is forthcoming from the Central Health Authority. The National Insurance Act makes provision for such persons as seek treatment for infirmity apparent to themselves. It makes no provision for the discovery and treatment of the great mass of infirmity, insidious and objective, which results from and occurs in the course of employment.

CLINIC.

The clinic served, as in past years, as a centre to which were referred cases for observation and, in the case of minor ailments, for treatment.

1,147 children, representing 1,405 conditions, passed through the clinic last year. 3,111 individual medical examinations were made in the clinic by the Medical Officer, and 9,941 treatments were given by the School Nurses and the Medical Officer.

I hope members of the Education Committee realise what the above work means, and how much of the time of the officers concerned it occupies. Last year there were only about 200 school days. It is almost impossible to get children to attend for treatment on non-school days. In each of these 200 days approximately 45 treatments were given. In connection with each treatment there is the record keeping. Each treatment has to be entered on a card, which has to be taken from a file and has to be replaced in the file. Each child's attendance has to be recorded on the school card and the time of leaving the clinic. The treatment of minor ailments requires much patience. The syringing of discharging ears, the cutting of hair and removal of impetigo crusts, the rubbing in of ointment to scalps affected with tinea, massage of deformed limbs, are not very attractive or very interesting forms of treatment, but they demand much perseverance and time. Not infrequently the clamour of children in the waiting-room has a very distracting influence, and the means for the enforcement of discipline in school are not available in the clinic. One frequently wishes they were. The premises are not adequate to the needs of the district. Inspections have to a large extent to be made in the office of the Medical Officer of Health, and it is not pleasant to have children with parasitic affections occupying this office. This, of course, will be remedied when the new clinic premises are opened.

The conditions inspected were as follows. It must not be assumed that the condition for which the child was presented was found in every case. Children were often presented who were stated to have certain

definite symptoms but who on inspection were found to be perfectly normal. Such cases were not infrequently those who wished to evade attendance at school.

	Boys.	Girls.	Times Inspected.
Debility	8 ..	15 ..	36
Nose and throat affections	20 ..	24 ..	45
Non-tubercular adenitis	8 ..	6 ..	23
External Eye Disease	61 ..	53 ..	474
Squint	4 ..	— ..	4
Defective Vision	7 ..	10 ..	21
Deafness and Otorrhœa	50 ..	35 ..	392
Mental.....	5 ..	1 ..	6
Heart and circulation	11 ..	17 ..	46
Respiratory affections	71 ..	98 ..	357
Nervous system	7 ..	8 ..	34
Non-pulmonary tuberculosis	11 ..	5 ..	40
Rickets	1 ..	5 ..	7
Skin diseases	198 ..	146 ..	1,002
Miscellaneous (including cleanliness inspections)	266 ..	255 ..	624
	729 ..	676 ..	3,111

The conditions treated and the number of treatments given at the minor treatment clinic were as follows :—

	Number of Treatments.	
	Boys.	Girls.
Eye inflammations	1,785	864
Otorrhœa and deafness and other ear affections	1,564	1,252
Rickets (massage).....	71	13
Skin affections :		
Ringworm of head	150	199
Ringworm of body	181	6
Impetigo contagiosa.....	726	690
Scabies (including caïres)	316	501
Other skin diseases	475	161
Septic conditions	586	223
Miscellaneous	67	111
	5,921	4,020

Co-operation between School Attendance Officers and the School Medical Officer's department was obtained by means of examinations conducted at the clinic. Each child sent by the School Attendance Officers was examined with reference to attendance, and the Attendance Officers were saved much superfluous visiting by means of certification of unfitness for definite periods. I readily admit that school medical inspection has occasioned diminished school attendance. Before medical inspection provided Attendance Officers with precise information they were under virtual compulsion of calling upon parents until they sent their children to school out of desperation, even when the child was unfit. Moreover, children suffering from transmissible affections attended school without comment.

Another factor which has its effect upon school attendance is the unhealthy condition of the schools. Many children who could attend schools built in accordance with modern conceptions of hygienic requirements are prevented from attending the schools in this district. I do not think attendance will improve—I am rather inclined to think the reverse will happen—during such period as homes and schools are definitely so much below reasonable standards of healthiness.

MENTAL DEFICIENCY ACT.

On December 31st, 1919, there were in the district, as far as can be ascertained, the following mentally defective children:—

Educable and Attending School.		Educable and not Attending School.		Ineducable.	
Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
2	5	6	1	3	1

The deficients attending school had no special provision made for them. They attended the ordinary elementary school, and so far as is known their presence there was not detrimental to the other children, and inasmuch as they were capable of being instructed to a limited extent their presence in school was not combated.

Those educable mental deficient who did not attend school were those who whilst capable of deriving benefit from education under special conditions were incapable of receiving instruction under ordinary elementary school conditions. In my report of 1914 I entered fully into the question of the education of mental deficient, and stated that there were

three methods of education of educable mental deficient to choose from :

- (1) Classes in the elementary schools ;
- (2) Boarding out ;
- (3) Special schools.

The Committee would not undertake to establish a special school for the small number of children to be provided for. They can board out the children in special institutions and receive half the cost of maintenance in grant. The difficulty of finding special institutions, however, is great. Special classes in the ordinary schools can be established for these mental defects, and it seems wholly desirable that something be done in order to meet the requirements of the Act. As it is there are children in the district who are capable of being educated to a certain extent for whom no provision is made.

The Authority can relinquish its powers and duties under the Mental Deficiency Act in favour of the County Council.

Two of the four ineducable children mentioned above have been notified to the County Council in accordance with the provisions of the Act.

One child, educable but a moral imbecile, was put under the care of the Guardians on account of the prejudicial social conditions in her home.

FEEDING OF NECESSITOUS SCHOOL CHILDREN.

The number of individual children fed between January 1st and December 31st was 76.

The number of meals was as follows :—

Breakfasts	3,664
Dinners	4,056
Total	7,720

The administration was jointly carried out by the School Medical Officer's staff and the Attendance Officers.

Children of defective nutrition found at medical inspection were recommended for meals if it was apparent that the defect might be due to insufficiency of food.

No meals were provided at the open-air school, there being no provision for any such undertaking. Cocoa was, however, given in the forenoon. As already stated, however, the arrangements at the open-air school are merely temporary, pending more favourable provisions.

TABLE I.
ROUTINE MEDICAL INSPECTIONS.

Age.	Entrants.			
	3.	4.	5.	Total.
Boys	39	147	222	408
Girls	44	102	204	350
Totals ...	83	249	426	758

Age.	Leavers.				Intermediate Group.	Grand Total.
	12.	13.	14.	Total.	8.	
Boys	241	32	—	273	217	898
Girls	205	26	—	231	249	830
Totals	446	58	—	504	466	1728

	Special Inspections. Special Cases.	Re-Examinations (i.e., No. of Children Re-Examined.)
Boys	591	1623
Girls	592	1724
Totals	1183	3347

No. of individual Children Inspected, 2911.

TABLE II.

RETURN OF DEFECTS FOUND IN THE COURSE OF
MEDICAL INSPECTION IN 1919.

Defect or Disease.		Routine Inspections.		Specials.	
		Number referred for treatment.	Number requiring to be kept under observation but not referred for treatment.	Number referred for treatment.	Number requiring to be kept under observation but not referred for treatment.
SKIN	Ringworm—				
	Head	4	—	17	—
	Body	—	—	13	—
	Scabies	5	—	49	—
	Impetigo	11	—	140	—
EYE	Other Diseases ..	10	—	130	—
	Blepharitis	10	—	35	—
	Conjunctivitis ..	13	3	65	—
	Keratitis	—	—	—	—
	Corneal Ulcer ...	—	—	4	—
EAR	Corneal Opacities	—	—	—	—
	Defective Vision	94	—	21	—
	Squint	22	—	4	—
	Other Conditions	—	—	8	—
	Defective Hearing	20	1	3	—
NOSE AND THROAT	Otitis Media	14	—	71	—
	Other Ear Disease	—	—	2	—
	Enlarged Tonsils	82	—	18	—
	Adenoids	29	—	18	—
	Enlarged Tonsils and Adenoids	10	—	5	—
HEART AND CIRCULATION	Other Conditions	3	—	10	19
	Enlarged Cervical Glands (Non-Tubercular) ...	3	—	5	5
	Defective Speech	—	—	—	—
	Teeth	2*	—	—	—
	Heart Disease—				
LUNGS	Organic	1	3	—	14
	Functional ..	—	5	—	3
	Anaemia	—	7	—	13
	Bronchitis	—	3	4	9
	Other Non-Tubercular Disease..	—	5	—	29
TUBERCULOSIS	Definite Pulmonary..	—	3	1	24†
	Suspected	—	—	—	62
	Glands	—	6	1	7
	Spine	—	—	—	1
	Hip	—	—	—	1
NERVOUS SYSTEM	Other Bones and Joints	—	1	—	2
	Skin	—	—	—	—
	Other Forms ...	—	1	1	1
	Epilepsy	—	1	—	3
	Chorea	1	—	11	—
DEFORMITIES	Other Conditions	—	—	—	—
	Rickets	19	1	2	—
	Spinal Curvature	—	—	—	—
	Other Forms....	3	1	1	—
	Other Defects or Dis ases	6	2	18	50

* Alveolar abscess only. No other dental conditions were referred for treatment, as no dental treatment is yet provided by the Education Authority.

† These cases are only cases which have been definitely diagnosed as cases of pulmonary tuberculosis by the County Tuberculosis Officers. Many other cases have been notified at various times, but cannot definitely be stated to be tubercular now.

TABLE III.
NUMERICAL RETURN OF ALL EXCEPTIONAL
CHILDREN IN THE AREA IN 1919.

			Boys	Girls	Total
Blind (including partially blind, within the meaning of the Elementary Education Act, 1893)	Attending Public Elementary Schools		4	2	6
	Attending Certified Schools for the Blind		1	—	1
	Not at School		—	—	—
Deaf and Dumb (including partially deaf, within the meaning of the Elementary Education Act, 1893)	Attending Public Elementary Schools		3	4	7
	Attending Certified Schools for the Deaf		—	1	1
	Not at School		—	—	—
Mentally Deficient	Feeble-Minded	Attending Public Elementary Schools	1	4	5
		Attending Certified Schools for Mentally Defective Children	1	—	1
		Notified to the Local (Control) Authority by the L.E.A. during the year	1	1	2
		Not at School	6	1	7
	Imbeciles	At School	—	—	—
		Not at School	3	1	4
	Idiots		—	—	—
Epileptics	Attending Public Elementary Schools		6	2	8
	Attending Certified Schools for Epileptics		—	—	—
	In Institutions other than Certified Schools		—	—	—
	Not at School		1	1	2
*Pulmonary Tuberculosis	Attending Public Elementary Schools		—	—	—
	Attending Certified Schools for Physically Defective Children		—	—	—
	In Institutions other than Certified Schools		—	—	—
	Not at School		7	21	28
Crippling due to Tuberculosis	Attending Public Elementary Schools		2	4	6
	Attending Certified Schools for Physically Defective Children		—	—	—
	In Institutions other than Certified Schools		—	—	—
	Not at School		1	3	4
†Crippling due to causes other than Tuberculosis	Attending Public Elementary Schools		31	25	56
	Attending Certified Schools for Physically Defective Children		—	—	—
	In Institutions other than Certified Schools		—	—	—
	Not at School		4	2	6
Other Physically Defectives (e.g., Delicate and other Children suitable for admission to Open Air Schools. Children suffering from Heart Disease)	Attending Public Elementary Schools		27	45	72
	Attending Open Air School		—	5	5
	Attending Certified Schools for Physically Defective Children		—	—	—
	Not at School		—	—	—
Dull or Backward	Retarded 2 years		45	26	71
	Retarded 3 years		20	8	28

* These cases are definitely stated by the Tuberculosis Officer to be tubercular. No other case is included even if stated to be tubercular by notification from sources other than the Tuberculosis Officer.

† Inclusive of deformities due to rickets, causing slight crippling, possibly only of a temporary nature.

TABLE IV.
TREATMENT OF DEFECTS OF CHILDREN DURING 1919.
A.—TREATMENT OF MINOR AILMENTS.

Disease or Defect.	No Referred for Treatment.	No. Treated.		Total.
		Under L.E.A. Scheme.	Otherwise.	
Skin {	Head	21	20	20
	Body	13	13	13
	Scabies	54	48	54
	Impetigo	151	149	150
	Other Skin Diseases . . .	140	136	140
Minor Injuries	—	—	—	—
Ear Disease	110	79	8	87
Eye Disease	135	115	4	119
(external or other)				
Miscellaneous	79	20	40	60

B.—TREATMENT OF VISUAL DEFECT.

Referred for Refraction.	No. Submitted to Refraction.				For whom were prescribed.	For whom glasses were provided.	Recommended for Treatment other than by glasses.	Received other forms of Treatment.	For whom no Treatment was considered necessary.
	Under L.E.A. Scheme (Clinic or Hospital).	By Private Practitioner or Hospital.	Otherwise.	Total.					
141	—	30	—	30	23	4	2	2	5

C.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

Referred for Treatment.	No. who received Operative Treatment.			No. who received other Forms of Treatment.
	Under L.E.A. Scheme Clinic or Hospital.	By Private Practitioner.	Total.	
175	—	25	25	15

TABLE V.
SUMMARY OF TREATMENT OF DEFECTS AS SHOWN IN TABLE IV.

Disease or Defect.	Number Referred for Treatment	Treated.		
		Under L.E.A. Scheme.	Otherwise.	Total.
Minor ailments	609	560	23	583
Visual Defects	141	—	32	32
Defects of Nose and Throat	175	—	40	40
Dental Defects	2	—	—	—
Other Defects	79	20	40	60
Total	1006	580	135	715

TABLE VI.
SUMMARY RELATING TO CHILDREN MEDICALLY INSPECTED AT THE
ROUTINE INSPECTIONS DURING THE YEAR 1919.

(1) The total number of children medically inspected at the Routine Inspections	1,728
(2) The number of children in (1) suffering from defects (other than uncleanliness or defective clothing or footgear) who require to be kept under observation (but not referred for treatment)	43
(3) The number of children in (1) suffering from—	
Skin Disease	30
Defective Vision (including Squint)	116
Eye Disease	26
Defective Hearing	21
Ear Disease	14
Nose and Throat Disease	124
Enlarged Cervical Glands (non-Tubercular)	3
Defective Speech	—
Dental Disease	2
Heart Disease—Organic	4
Functional	5
Anæmia	7
Lung Disease (non-Tubercular)	8
Tuberculosis—	
Pulmonary—Definite	3
Suspected	—
Non-Pulmonary Tuberculosis	8
Disease of the Nervous System	2
Deformities	24
Other Defects or Diseases	8
(4) The number of children in (1) who were referred for treatment (excluding uncleanliness, defective clothing, etc.)	362
(5) The number of children in (4) who received treatment for one or more defects (excluding uncleanliness, defective clothing, etc.)	114

REPORT ON THE PROGRESS OF THE WORK DURING THE YEAR 1901

(1) The total number of cases of disease reported during the year 1901 was 1,123.

(2) The number of cases of disease reported during the year 1901 was 1,123.

(3) The number of cases of disease reported during the year 1901 was 1,123.

(4) The number of cases of disease reported during the year 1901 was 1,123.

(5) The number of cases of disease reported during the year 1901 was 1,123.

(6) The number of cases of disease reported during the year 1901 was 1,123.

(7) The number of cases of disease reported during the year 1901 was 1,123.

(8) The number of cases of disease reported during the year 1901 was 1,123.

(9) The number of cases of disease reported during the year 1901 was 1,123.

(10) The number of cases of disease reported during the year 1901 was 1,123.

(11) The number of cases of disease reported during the year 1901 was 1,123.

(12) The number of cases of disease reported during the year 1901 was 1,123.

(13) The number of cases of disease reported during the year 1901 was 1,123.

(14) The number of cases of disease reported during the year 1901 was 1,123.

(15) The number of cases of disease reported during the year 1901 was 1,123.

(16) The number of cases of disease reported during the year 1901 was 1,123.

(17) The number of cases of disease reported during the year 1901 was 1,123.

(18) The number of cases of disease reported during the year 1901 was 1,123.

(19) The number of cases of disease reported during the year 1901 was 1,123.

(20) The number of cases of disease reported during the year 1901 was 1,123.

(21) The number of cases of disease reported during the year 1901 was 1,123.

(22) The number of cases of disease reported during the year 1901 was 1,123.